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ABSTRACT

As defined in North Carolina, curriculum alignment is the process that examines the way curriculum is taught to ensure it is consistent with the content of the curriculum as specified in "The Standard Course of Study." The process also includes aligning classroom instruction and assessments to the state assessments. This training skills packet contains an introduction to alignment, an overview of curriculum alignment, and a description of curriculum alignment in North Carolina. It contains 13 activities necessary for trainers to present the materials to participants. Topics include the definition of alignment, why curriculum should be aligned, how it is achieved, and what the issues or implications of alignment are. The packet contains an evaluation form, handouts, and transparencies. (DFR)

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# Curriculum Alignment

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# Curriculum Alignment

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# Implementation Suggestions

# Implementation Suggestions

**What skill level does a trainer need to deliver this skill packet?**

Trainers delivering this skill packet, *Professional Development for School Improvement*, need moderate to high trainer skills. Some of the activities require the ability to read a group and adapt activities based on the group's reactions to an activity. Other activities require trainers to be comfortable with processing (i.e., synthesizing, analyzing) the outcomes with participants.

**How can a trainer prepare to deliver this skill packet?**

To prepare to deliver this skill packet, a trainer should read and become thoroughly familiar with any materials participants are expected to read as part of activities and the documents listed in the bibliography at the end of the skill packet.

Additionally, the trainer should review any activities being used in the skill packet to make sure that s/he is thoroughly familiar with the "flow" of the parts of the activity and comfortable with leading participants through the activity.

Next, a trainer should prepare handouts and transparencies to be used in the skill packet.

Finally, a trainer should prepare the training room, taking care to provide participants with as many creature comforts as possible.

**What tips are there for working with adults?**

The following statements about adults as learners are taken from the article by Fred H. Wood and Steven R. Thompson, "Assumptions about Staff Development Based on Research and Best Practice."

| Adult Learner Characteristics | Staff Development Implications |
|---|---|
| Adults will commit to learning when the goals and objectives are considered realistic and important to them. | Staff Development should address areas that educators believe are important and have immediate application in the "real world." |
| Adults will learn, retain, and use what they perceive is relevant to their personal and professional needs. | Staff development must enable teachers and administrators to see the relationship between what they are learning and their day-to-day activities and problems. |
| Adult learning is ego involved; asking an educator to learn and implement new professional behaviors may promote a more or less positive view of self. | Staff development should be structured to provide support from peers and reduce the fear of judgment during learning. |
| Adults need to see the results of their efforts and have feedback on how well they are doing. | Staff development should provide opportunities for educators to try out what they are learning and receive structured, helpful feedback. |
| Adults are much more concrete in the way they operate than formerly thought. | Educators should have an opportunity for directed, concrete experiences in which they apply what they are learning in a real or simulated work setting. |
| Adults who participate in small groups are more likely to move their learning beyond understanding to application, analysis, synthesis, and evaluation. | Staff development ought to include learning in small groups in which teachers and administrators have an opportunity to share, reflect, and generalize from their learning and experiences. |
| Adults come to learning with a wide range of previous experiences, knowledge, self-direction, interests, and competencies. | Staff development must accommodate this diversity in terms of needs, knowledge, readiness to learn, etc. |
| Adults want to be the origin of their own learning and will resist learning situations that they believe are an attack on their competence. | Staff development needs to give educators some control over the what, who, how, why, when, and where of their learning. |
| Because the transfer of learning is not automatic for adults, it must be planned for and facilitated. | Coaching and other kinds of follow-up support are needed to help educators transfer learning into daily practice. |

**What are some training tips?**

- Select the most comfortable site for training with comfortable chairs, tables, good lighting, adjustable heat or air conditioning, adjacent rest rooms, etc.
- Use the best audio-visual equipment that is available.
- Have music available to use before the session, during breaks, at lunch, etc.
- Have a roll sheet for participants to sign in each day.
- Have participants make name tags.
- Have individually wrapped pieces of candy on each table for snacking.
- Place materials in folders.
- Have as many activities as possible posted on walls prior to the start of the session in which they will be used.
- Have a bell or "popper" to use as a signal during activities.
- Have supplementary materials on display for review by participants.
- Have extra materials and business cards available for participants to take as they wish.
- Start each new session with a warm up activity.
- Start on time; finish on time; take breaks as indicated.
- Keep pace appropriate to activities. Do not pressure, but do not lag.
- Keep atmosphere friendly, helpful, open, and humorous.
- Re-group table groups occasionally so that participants work new people.
- Do energizers from time to time as energy lags—just before lunch, after lunch, in the afternoon after a day-long session. For example, dance the "hokey-pokey"; do sit-down exercises; do deep breathing exercises.
- Observe constantly to gauge the level of participants' involvement. Try to involve everyone in discussion by having various tasks for table group participants to perform (e.g., reporter, recorder, time keeper, facilitator).

**How should this skill packet be delivered?**

For an in-depth coverage of the information in this skill packet, trainers should deliver the activities in brief sessions spread out over a span of time (e.g., several weeks or months).

Also, warm-up activities, supplemental activities, homework assignments and keeping a journal can be added to enrich the basic content of the packet.

Participants may determine that some of the topics covered in the skill packet deserve further study. In their study, they may want to use some of the following types of activities:

- journal clubs,
- study groups,
- structured classroom observations with debriefing sessions,
- structured visitations with debriefing sessions,
- workshops with application in the classroom, and
- development of pacing guides, instructional materials, or curriculum guides.

In summary, for the best effect, the activities in this skill packet should be spread over time with provision for **reflection**, **application**, and **synthesis** built into the delivery schedule.

**How should the training room be set up?**

The training room should be set up so that all participants are as comfortable as possible and can see and hear everything that they need to participate in the activities. The trainer needs a table for activity sheets, transparencies, materials, and equipment; a refreshment table; a materials display table; and a small table set up near the entrance for agendas, name tags, and roll sheets.

# Organization of Materials

**How are the materials in the skill packet organized?**

The activities in the entire skill packet are described in a Packet Overview. Then the activities in this skill packet are arranged sequentially and described on individual activity direction sheets.

**How is the Packet Overview to be used?**

The Packet Overview gives a trainer a **quick overview** of the entire skill packet. The Packet Overview is laid out in a matrix similar to the one at the top of each activity direction sheet. In this way, a trainer has a ready-reference to the entire skill package:

- the number of each activity,
- the time needed to carry out all of the activities in each section,
- the purposes of each section, and
- the content of each section.

**How are the activity direction sheets formatted?**

Each activity direction sheet is formatted the same way. Centered at the top of the page, the activity number and name are listed. Following the activity number and name is a matrix giving

- the time necessary to carry out the activity,
- the purpose(s) of the activity,
- the setting for the activity (e.g., individual, small group, triads), and
- the materials and equipment needed for the activity.

The remainder of each activity direction sheet is divided into two columns. On the **left side of the page** in bold letters are listed the actions which the trainer should do to carry out the activity. Also listed on the left side are the equipment and materials as they are needed **sequentially** in the activity. On the **right side of the page**, the trainer is given a more complete explanation as to how the activity is to be carried out.

# Packet Overview: Curriculum Alignment

| SECTION | TIME | PURPOSE | CONTENT |
|---|---|---|---|
| I<br><br>Introduction to Alignment | 45 minutes | To compare a generic alignment process and curriculum alignment | Generic examples of alignment<br><br>Comparisons of generic process and curriculum alignment |
| II<br><br>Overview of Curriculum Alignment | 3 hours 15 minutes | To explain terms and concepts used in curriculum alignment and to apply them to current conditions in classrooms and schools<br><br>To describe the process of curriculum alignment | Dimensions of curriculum alignment<br><br>Overview of curriculum alignment<br><br>Definitions of terms and concepts<br><br>Scenarios of alignment problems in classrooms and schools<br><br>Ways to establish alignment<br><br>Applications of alignment issues to current conditions in schools |
| III<br><br>Curriculum Alignment in North Carolina | Training: 2 hours<br><br>Alignment project: time required will vary school to school | To design a comprehensive form for grade level or subject area alignment projects<br><br>To align the curriculum for a grade level or subject area<br><br>To plan for monitoring and maintaining curriculum alignment | Format for unit analysis<br><br>Sample alignment forms<br><br>Resources for alignment<br><br>Suggestions for next steps or action plans |

# OUTCOMES

At the end of this skill packet, participants will be able to:

- compare a generic alignment process and curriculum alignment
- explain terms and concepts used in curriculum alignment and to apply them to current conditions in classrooms and schools
- describe the process of aligning the written, taught, and tested curriculum
- design a comprehensive form for grade level or subject area alignment projects
- align the written, taught, and tested curriculum for a grade level or subject area
- plan for monitoring and maintaining curriculum alignment

# Section I: Introduction to Alignment

# SECTION I: ACTIVITY 1

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 45 minutes | • To define alignment<br>• To identify examples of alignment<br>• To compare curriculum alignment with a familiar example of alignment<br>• To assess prior knowledge<br>• To compare alignment issues | • Small Groups<br>• Whole Group<br>• Pairs | • Trainer Notes: Alignment Examples<br>• Overhead projector<br>• Transparencies: Alignment Activity, Alignment Example, Think-Pair-Share, K-W-L Chart<br>• Transparency markers<br>• Chart paper<br>• Markers for chart paper<br>• Prepared charts (optional)<br>• Handout: K-W-L Chart |

**Describe Activity**

**Note to Trainers:** Read all trainer notes before beginning activities

Participants will define the term ***alignment*** and brainstorm things that need to be aligned. They will identify reasons why alignment is needed and decide when it should occur. Prior knowledge of curriculum alignment will be assessed. Participants will compare elements of the alignment process for curriculum with a familiar example of alignment.

**Activity Directions**

Trainer Notes

Transparency -Alignment Activity

In table groups, reach consensus on a definition of alignment. Have participants brainstorm a list of things that need to be aligned in order to function or work properly. Have each group select one item from their list and answer the following:

- What needs to be aligned?
- Why is alignment needed?
- When does alignment need to occur?

Select a recorder to list responses and a reporter to share the group's ideas.

**Identify common elements**

Chart paper/Markers

Blank transparency/ Markers

Identify common or similar responses across groups. List these on chart paper or a transparency. Emphasize responses that indicate how alignment contributes to efficient and effective operations or functioning, increased productivity, or the successful completion of a task.

If some groups do not provide such responses, use probing or guiding questions to assist them in doing so.

**Select alignment example**

Transparency or prepared chart - Alignment Example

Select an alignment example (from the trainer notes or from the examples generated by participants) with which most participants will be familiar, such as wheel alignment. Review appropriate responses for the alignment example and create summary statements as shown below. Use the prepared transparency for recording information or put the outline on chart paper prepared in advance.

**Note: This example is provided as a model for the trainer. Another example may be substituted.**

***Alignment example***: wheel alignment

- What needs to be aligned?

  the 4 wheels on the vehicle

***Summary statement***: Main parts need to be aligned.

- Why is alignment needed?

  to prevent pulling to the right or left

  to prevent uneven wear on tires

  to prevent eventual decrease in fuel mileage

***Summary statement***: Alignment is needed to help the vehicle run smoothly and operate efficiently.

- When does alignment need to occur?

  as soon as possible once misalignment has been detected

***Summary statement***: Alignment needs to occur as soon as a problem is detected.

---

**Think-pair-share activity**

Have participants engage in a **Think-Pair-Share** activity which will assess their current understanding of curriculum alignment before a formal definition is introduced. They will use a **K-W-L chart** to record information. Ask participants to follow these

steps:

Transparency - Directions for Think-Pair-Share Activity

Transparency markers

Handout - K-W-L chart

**Think** about the first two questions:

- What do we already know about curriculum alignment?
- What do we want or need to know about curriculum alignment?
- What have we learned about curriculum alignment?

**Pair with a partner** and **share** responses to the questions.

Transparency or prepared chart - K-W-L chart

Markers for chart paper

One partner will record ideas on a **K-W-L** chart and the other partner will report out to the whole group.

Ask participants to keep their charts for future reference. The "**L** column - what we have learned" will be completed at the end of the training session.

The trainer should compile responses on a transparency or chart paper prepared in advance. Post the chart or keep the transparency handy for future reference.

**Note:** Before ending the training session, the chart should be reviewed to determine if participants have learned everything listed in their **W** column.

---

**Make connections**

Before providing an overview of curriculum alignment, help participants make connections between alignment issues in general and potential elements of curriculum alignment.

**Predict and compare**

Based on the information recorded in the K column of the K-W-L chart, ask participants to predict how curriculum alignment might compare to other types of alignment, such as wheel alignment. Use the transparency to focus on the three guiding questions asked about wheel alignment or whatever example your group choose.

Transparency - Alignment Example

If needed, model appropriate responses for the first question as follows:

- What needs to be aligned?

In wheel alignment, the four wheels on a vehicle are the parts that need to be aligned. In curriculum alignment, instruction and assessment are two main parts that need to be aligned.

Suggest a general summary statement such as the following:

***Summary statement***: In curriculum alignment, as in other types of alignment, there are main parts or key elements that must be aligned or functioning in the proper relationship.

Ask for volunteers to suggest responses to the other two questions and to propose summary statements. Have the total group accept the ideas offered or revise them in order to reach agreement on appropriate responses.

Tell participants that in the next activity an overview of curriculum alignment will be provided. As information is presented, they will be able to assess how accurate their predictions were.

# SECTION I: ACTIVITY 1
## Trainer Notes - Alignment Examples

**Rationale for activity**

Research on adult learners indicates that they are more likely to comprehend and retain information if they can hook or connect new learning to prior knowledge. Adult learners also need to make connections or application to real world experiences.

With these learner characteristics in mind, Activity 1 was designed to present a familiar example of the concept of alignment in order to help participants understand what might be a less familiar concept - curriculum alignment.

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**Examples of alignment**

Below are listed some examples of things that need to be aligned. After each time the activity is presented, add any other examples that participants generate to this list for future reference.

Things that need to be aligned:

- wheels on any type vehicle
- a train on tracks or anything that runs on a track
- sights on a gun
- legs on appliances, such as a stove
- headlights on any type vehicle
- the cuffs on a shirt
- buttons and button holes
- the teeth on a zipper
- eyeglass frames on ears
- braces on teeth
- body posture (i.e., shoulders aligned)
- margins on a page

**Selection of an example**

The example selected for modeling the process should be one with which the trainer and the majority of participants are familiar.

**Referencing the example**

As the training progresses, there will be opportunities to refer to the example when making key points about alignment issues. For instance, when discussing *context alignment* the trainer might make comments such as those listed below. (Context alignment is teaching the way we test . An example is matching the format of test items used on teacher-made tests with the format of items used on state assessments).

"Just as the wheels on a car have to be aligned or buttons have to line up with button holes, the format of test items teachers use for assessing instruction, such as multiple choice or open-ended items, should be the same type which appear on end-of-grade or end-of-course tests."

"Remember our zipper example - the teeth need to be aligned before starting to zip the jacket. Before the end-of-grade tests are administered, teachers should use *Item Bank Testlets* to familiarize students with the format of items used on those tests."

**Summary**

The use of one familiar example throughout the training will provide all participants with a common frame of reference. Just as the example was initially used to hook to participants' prior knowledge or experience, it can be used continuously to reinforce key points or concepts.

**Section I Activity 1**
**Transparency - Alignment Activity**

- **What needs to be aligned?**

- **Why is alignment needed?**

- **When does alignment need to occur?**

**Select a recorder to list responses and a reporter to share the group's ideas.**

**Section I Activity 1**
**Transparency - Alignment Example**

- **What needs to be aligned?**

***Summary statement*:**

- **Why is alignment needed?**

***Summary statement*:**

- **When does alignment need to occur?**

***Summary statement*:**

Section I Activity 1
Transparency - Think-Pair-Share

- ***Think*** **about the first 2 questions on the K-W-L chart:**

  **What do we already know about curriculum alignment?**

  **What do we want or need to know about curriculum alignment?**

  - ***Pair*** **with a partner and** ***share*** **responses to the questions**

**Partner 1: Record ideas on the K-W-L chart**

**Partner 2: Report out to the whole group**

*** <u>Reminder</u>: Save the chart to complete the L column at the conclusion of the training session**

## Section I Activity 1
## Transparency - Curriculum Alignment: K- W- L Chart

| K | W | L |
|---|---|---|
| What do we *know* about curriculum alignment? | What do we *want* or need to know about curriculum alignment? | What have we *learned* about curriculum alignment? |
| | | |

## Section I Activity 1
## Handout - Curriculum Alignment: K- W- L Chart

| K | W | L |
|---|---|---|
| What do we *know* about curriculum alignment? | What do we *want* or need to know about curriculum alignment? | What have we *learned* about curriculum alignment? |
| | | |

# Section II: Overview of Curriculum Alignment

# SECTION II: ACTIVITY 2

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 10 minutes | • To identify and define the dimensions of curriculum alignment | • Whole Group | • Transparencies: Dimensions of Curriculum Alignment (Unshaded)/ (Shaded) |

**Describe Activity**

Participants will be introduced to the various dimensions of curriculum alignment. The sections of this training packet that address each dimension will be identified.

**Identify Dimensions**

Show the transparency "Dimensions of Curriculum Alignment" (Unshaded). State that the following four dimensions of curriculum alignment will be addressed in this training packet:

Transparency – Dimensions of Curriculum Alignment (unshaded)

- **What** is curriculum alignment?
- **Why** align curriculum?
- **How** is curriculum alignment achieved?
- **What are the issues or implications of alignment?**

**Sequence of Presentation**

The definition of curriculum alignment (the **what**) and the rationale for alignment (the **why**) will be discussed in this activity. The process of aligning the written, taught, and tested curriculum (the **how**) will be explained in the further activities in Section II and in Section III. The fourth dimension, the **what next issues/implications** will be the focus of the final activity in Section III.

**Define Curriculum Alignment**

Transparency – Dimensions of Curriculum (what/why shaded)

Using the transparency "Dimensions of Curriculum Alignment" (Shaded), tell participants that curriculum alignment is the process of bringing into proper relationship three aspects of curriculum: the written, the taught, and the tested curriculum. It is a generic process that applies to all content areas and can be used at all grade levels K-12.

As defined in North Carolina, curriculum alignment is the process that examines the curriculum being taught to ensure it is consistent with the content of the curriculum as defined in *The Standard Course of Study*. The process also includes aligning classroom instruction and assessments to the state assessments.

**Rationale for Curriculum Alignment**

Explain that the New ABCs of Public Education is a plan that emphasizes strong accountability for student achievement and focuses students and teachers on the basics of reading, writing, and mathematics. It provides maximum local control for schools and school districts. The Student Accountability Standards are considered to be the next level of accountability in the ABCs. The ABCs moved accountability from the district to the school level. The student accountability standards will result in our state having a more comprehensive accountability program since students and their parents will be more accountable for performance.

Under the ABCs, the standard that schools are expected to achieve is called "expected growth." This is the expectation of a year's worth of growth for a year's worth of work. The end-of-grade and end-of-course tests are the measures used to determine growth.

The student accountability standards require students to demonstrate proficiency by scoring at Level III or above on the end-of-grade tests in both reading and mathematics. In addition, students must score 2.5 or above on the state writing assessments.

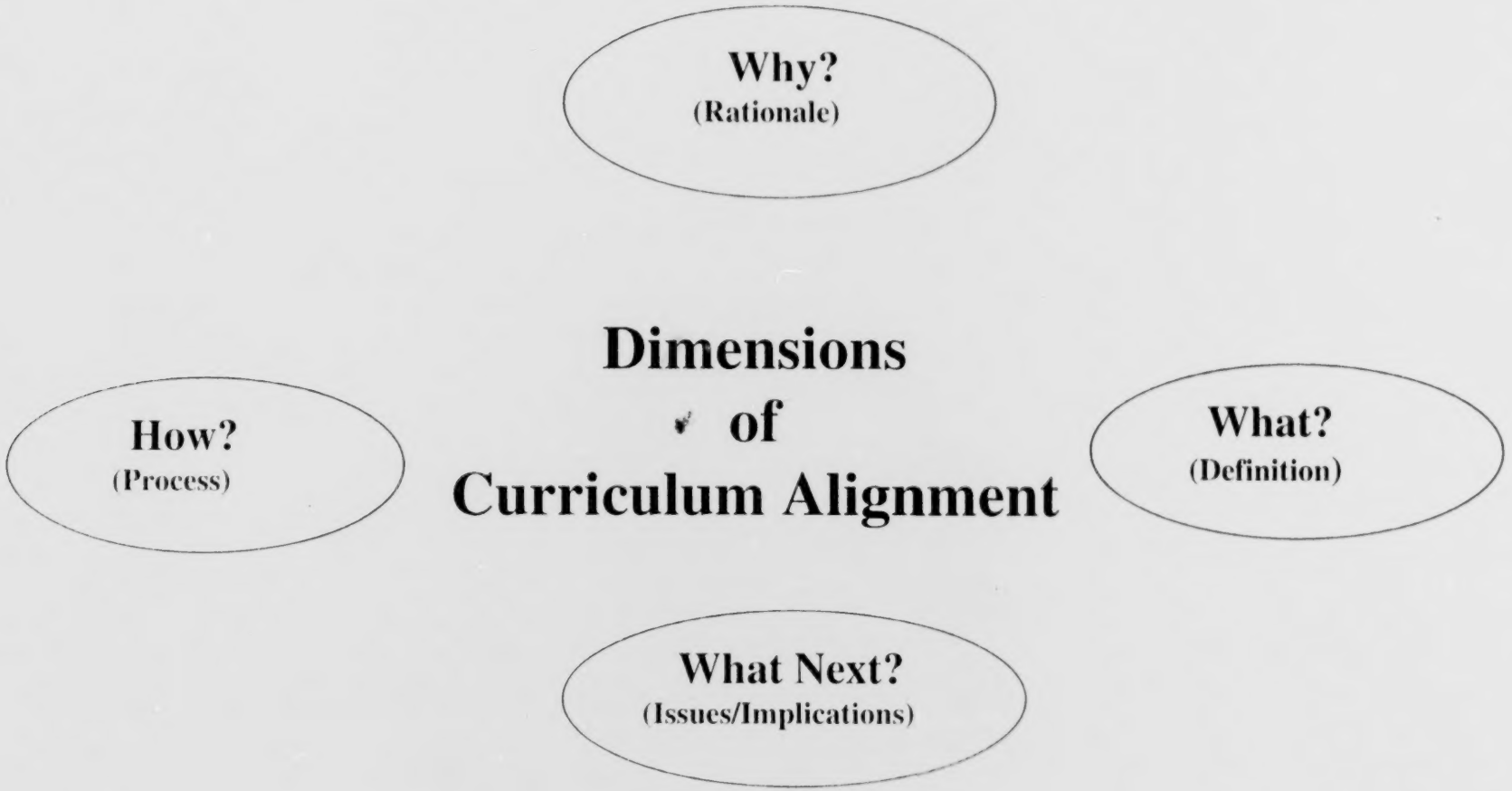
Since these state tests are based on the state curriculum, it is critical that instruction in schools be aligned to *The Standard Course of Study*. Teachers have the flexibility to extend the state curriculum by teaching additional content, as long as they teach the required content as a minimum. If time and resources are devoted to unaligned content at the expense of the mandated curriculum, students will be less likely to achieve the level of

proficiency and schools will not meet expected growth standards.

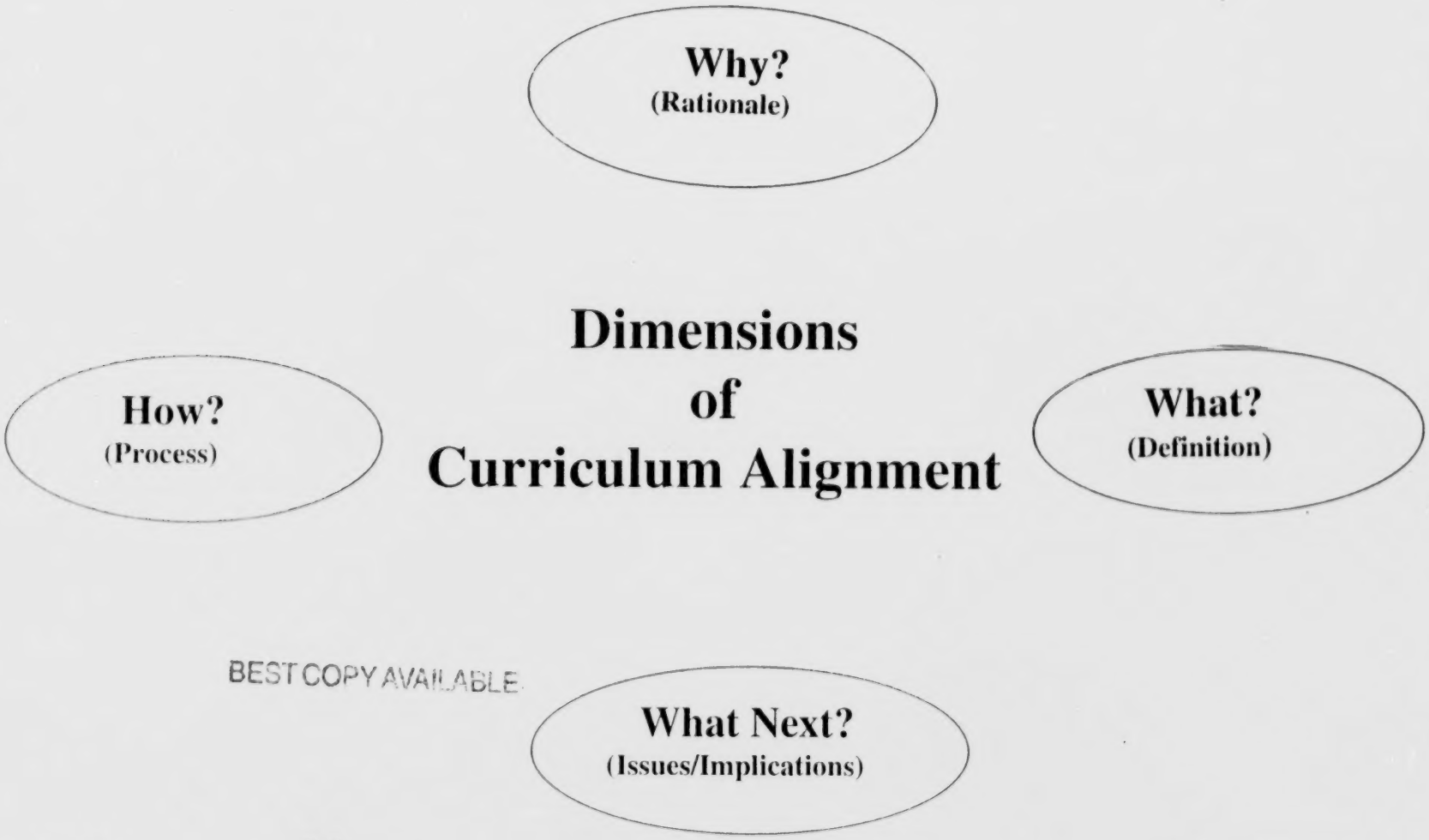
**Summarize**

Refer to the transparency "Dimensions of Curriculum Alignment" (Shaded) and state that the first two dimensions of curriculum alignment – **what** and **why** - have been discussed. The activities which follow will introduce participants to the process, thereby addressing the **how** .

**Section II Activity 2**
**Transparency – Dimensions of Curriculum Alignment (Unshaded)**



**Section II Activity 2**
**Transparency – Dimensions of Curriculum Alignment (Shaded)**

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# SECTION II: ACTIVITY 3

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 15 minutes | • To assess current knowledge prior to instruction | • Individual<br>• Whole Group | • Transparency: Sample Consensogram<br>• Overhead Projector<br>• Chart paper - consensograms<br>• Adhesive dots – 1 color |

**Describe Activity**

Participants will do a self-assessment of their current understanding of key terms and concepts prior to instruction. They will rate their knowledge level on a consensogram.

**Prepare consensograms**

Prior to this session, the trainer will need to prepare a consensogram for each of the following topics:

- Curriculum alignment
- Content alignment
- Context/format alignment
- Curriculum coordination
- Curriculum articulation
- Design alignment
- Delivery alignment
- Frontloading/Backloading

A model for the consensograms is provided on the transparency. Post the consensograms around the training room and have adhesive dots readily accessible. All participants will need the same color dots.

**Activity Directions**

Transparency – Sample Consensogram

Show the transparency of a sample consensogram while giving instructions for the activity. Give each participant one dot per consensogram (8 dots). Instruct participants to read the topics listed on charts. State that these are major topics to be discussed in Section II of the training. Direct participants to self-assess their current knowledge of the topics and to indicate their level of understanding by placing a dot on the first line above the appropriate number.

Use the following examples to clarify directions if needed:

- If a participant thinks s/he has a thorough understanding of curriculum coordination, s/he might place the dot on the line above the number 90.
- If another participant has little understanding of context/format alignment, he might place his dot on the first line above the number 10.

Tell participants that the dots will form a bar graph to show the consensus of the group's current understanding of the topics. State that at the end of Section II, participants will repeat the process to assess the learning that has occurred during this section of instruction.

**Note to trainer:**

The trainer should refrain from making any comments or responding to questions about the topics during this activity.

---

**Keep consensograms**

Keep consensograms posted around the training room throughout the training sessions, if possible. If they have to be taken down, keep the charts for use in the final activity of Section II.

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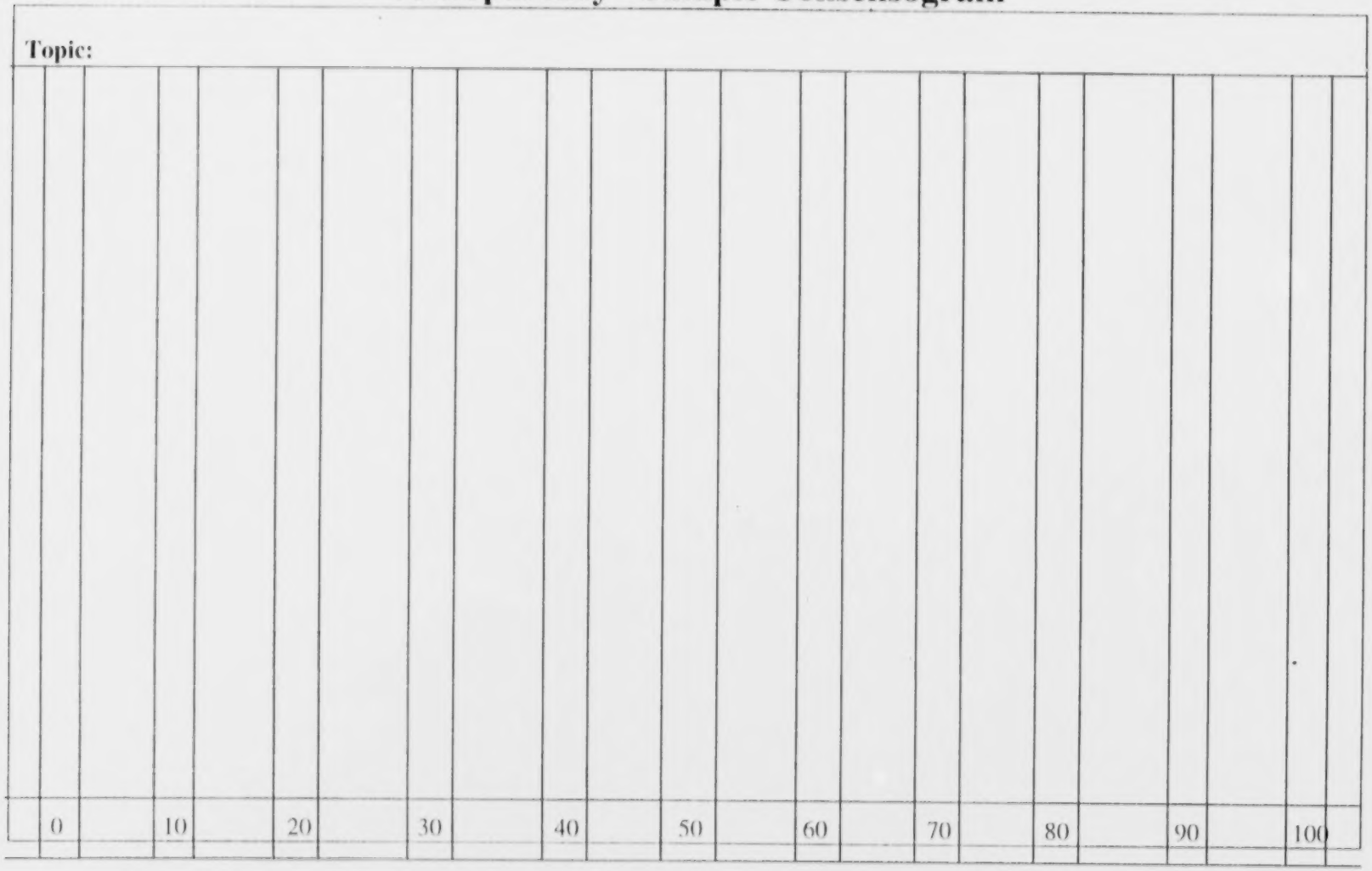
## Section II Activity 3
## Transparency - Sample Consensogram



# SECTION II: ACTIVITY 4

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 50 minutes | • To present an overview of the alignment process through a mini-lecture<br>• To introduce specialized vocabulary | • Whole Group | • Trainer Notes: Curriculum Alignment Overview<br>• Overhead projector<br>• Transparencies: Curriculum Management Terms, What Curriculum Must Do ..., Two Aspects of Curriculum, Curriculum Design ..., Curriculum Alignment, Two Levels of ..., Articulation/ Coordination<br>• Handout: Curriculum Alignment : Key Terms ... |

**Describe Activity**

The trainer will present a mini-lecture to provide an overview of curriculum alignment. The specialized terms and concepts associated with the process will be introduced and explained.

**Activity Directions**

Use transparencies to guide the mini-lecture and trainer notes to provide explanation and elaboration for terms and concepts. Give participants the handout that defines the terms. Tell them space has been provided for making brief notes in addition to the definitions listed.

Transparencies

Notes – Curriculum Alignment Overview

Handout – Curriculum Alignment : Key Terms and Concepts Defined

# SECTION II: ACTIVITY 4

## Trainer Notes - Curriculum Alignment Overview

**Introduction to Model**

This mini-lecture is based on the work of Fenwick W. English. The model for curriculum alignment presented in this training is the model he developed.

(Background information on Fenwick English is provided following the mini-lecture notes).

**Specialized Vocabulary**

Curriculum alignment, like many other processes in education, uses a specialized vocabulary. Although most of the terms are familiar to educators, they have specific or unique definitions when applied to the alignment process.

**Curriculum**

Transparency - Curriculum Management Terms

Curriculum is any document or plan that exists in a school or school system that defines the work of teachers. It identifies the content to be taught, the scope and sequence of that content, and to some extent, the methods to be used in the process. Simply stated, curriculum is the work plan for teachers.

---

**Teaching**
**Instruction**
**Testing**
**Learning**

If curriculum is defined as the work plan, teaching can be defined as the work. When teaching is guided by a work plan – the curriculum - it becomes instruction. Instruction is focused and connected or systematized teaching. Testing is defined as the work measurement. Learning is the outcome of the work.

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**Curriculum Documents**

Most schools have a variety of work plans or curriculum documents available for teachers to use. These include textbooks, curriculum guides, scope and sequence charts, accreditation guidelines, state education agency guidelines, state board guidelines and policies, state law, and local board policies. Often, these various documents do not match or align well with one another. They may contain contradictory information and be so open to interpretation that confusion arises when they are to be implemented.

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**Focus & Connect**

In order to prevent confusion, curriculum should serve two purposes in schools: to focus and to connect the work of teachers.

Transparency – What Curriculum Must Do In Schools

This means teachers must identify what is essential for students to know and be able to do. *The Standard Course of Study (SCS)* is the document that details what must be taught in every content area. It describes all the required course content and lists goals and objectives – grade by grade and course by course. The *SCS* identifies what should be taught but not how it should be taught. Curriculum support documents such as curriculum guides, handbooks, matrices and other resources developed locally or at the state level, provide much useful information to help teachers identify what is essential for students to know and be able to do.

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**Curriculum Design & Delivery**

Transparency – Two Aspects of Curriculum

Two important aspects of curriculum are design and delivery. Simply put, curriculum design indicates what to teach and curriculum delivery indicates how to teach. Design is the creation of the work plan prior to delivery.

**Design**

Design is the act of creating curriculum according to certain specifications or a template. The template identifies the criteria or requirements a curriculum must fulfill or include. These might include state law, state testing, national goals, local priorities, and a specific learning theory or grouping practice.

**Delivery**

Delivery refers to the implementation of curriculum. This may include supervising, monitoring, or using feedback to improve the curriculum once it has been created and put into place in schools.

**Faulty Design & Delivery**

Often there are flaws in the design process. The selection of textbooks (one kind of work plan and curriculum) and/or the writing of curriculum guides (another kind of work plan) may not be well connected or aligned to each other. If the content of the textbook does not match the curriculum goals and objectives, there is misalignment. When teachers use textbooks as the sole basis for delivery of instruction, often they will not be teaching what is in the curriculum.

Inadequate design can lead to inadequate delivery. When designing or planning for instruction, teachers need to be aware of the varied learning styles and preferences of their students. Curriculum-based instruction should promote interactive, participatory learning opportunities for students. Instruction should extend students thinking and reasoning to higher levels. Both content and skills should be taught.

If these critical components are not part of curriculum design, they

will not likely be part of the delivery. Instructional strategies which focus on higher order thinking skills, learning styles and active student involvement should be major considerations when planning for delivery. If these components are built into the tests or assessments but are absent or inadequately addressed in design and delivery of curriculum, then curriculum alignment needs to occur.

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**Design & Delivery Alignment**

Transparency – Curriculum Design/ Delivery Alignment

Curriculum design alignment is the relationship between the curriculum (the work plan) and the test (the work measurement). Design alignment is built into the curriculum as it is developed. In North Carolina schools, design alignment should be in place if schools are teaching the state curriculum (*SCS*) and are administering the end-of-grade and end-of-course tests which are part of the state accountability program because these tests are based on the state curriculum.

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Curriculum delivery alignment is the relationship between the curriculum (the work plan) and the instructional strategies (the delivery). If high quality exists in design, high quality instruction is more likely to be delivered.

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**Curriculum Alignment**

Transparency - Curriculum Alignment (3 circles)

Curriculum design alignment and delivery alignment are major components of the larger process of curriculum alignment. Curriculum alignment refers to the match or overlap between the content and format of the curriculum. Curriculum alignment is the process of aligning or bringing into proper relationship three aspects of curriculum: the written, the taught, and the tested curriculum.

---

**The Written Curriculum**

**The written curriculum refers to what should be taught.**

*The Standard Course of Study*

In North Carolina this is *The Standard Course of Study* - the official, legal document that details what must be taught in every content area. *The Standard Course of Study* describes all the required course content and lists goals and objectives - grade by grade and course by course.

Support Documents

*The Standard Course of Study* is the only curriculum document that teachers and schools are required to follow. All other documents are not required; they are merely suggestions. While *The Standard Course of Study* tells **what** must be taught, it does

not specify **how** content is to be taught. Support documents such as curriculum guides, handbooks, matrices, and resource listings contain suggestions and sample materials that teachers may use.

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**The Taught Curriculum**

**The taught curriculum refers to what is being taught.**

Hopefully, in North Carolina the written curriculum is also the taught curriculum - *The Standard Course of Study*; however, research and experience have shown that this is not always the case. Research indicates that 97% of class time is typically spent referencing textbooks. If *The Standard Course of Study* and the texts are aligned, there is no problem. Misalignment occurs when the textbook being used does not address the same content as that outlined in the curriculum (SCS).

Since the majority of textbooks are written for national markets, they often do not align well with the scope and sequence of curriculum in North Carolina. Therefore, a textbook should not be the sole guide for instruction. Texts should be viewed as one of several types of resources appropriate for designing instruction.

**The Tested Curriculum**

**The tested curriculum refers to what is being tested or assessed and how it is being measured.**

In order for assessment or testing to be fair, the tests should be aligned with the intended curriculum. Alignment between the curriculum and the test occurs at two levels: content alignment and context/format alignment.

**Content Alignment**

**Content alignment** refers to teaching **what** is tested. The content used to design test items is drawn from the intended written curriculum. This means that content from *The Standard Course of Study* rather than content from textbooks is used for test construction. To ensure content alignment from the curriculum to the tests, teachers are encouraged to use in their instruction the same terms or concepts that appear in the curriculum because the same language should be used in test items.

Transparency – Two Levels of Alignment

For example, if an elementary teacher talks about "words that have the same meaning" and "words that have opposite meanings" without using the terms "synonym" and "antonym"

during instruction to label such words, some students may not know what to do when the test states "give a synonym for the word sketch," or "which word is an antonym for sad?"

Secondary teachers can determine if alignment is adequate by examining their end-of-course test results. Teachers should analyze the results by goals and objectives to determine where the state and local requirements have been successfully met by their students. In instances where these requirements have not been met, teachers must determine if the curriculum content was not addressed during instruction. If students are not taught the entire curriculum that is tested, they can not be expected to perform well on the entire test. If all the curriculum was taught, then teachers will also need to focus on their delivery methods – the instructional strategies that were used to teach the goals and objectives on which student performance did not meet expectations. This is an indication that although teaching occurred, learning did not take place; therefore, the teacher will need to adjust instruction and try different strategies to address the content.

Some states have no mandated curriculum; instead, they allow schools and/or districts to develop local curriculum. Often these same states require that a standardized test be administered in all schools. It is highly probable that the taught curriculum and the tested curriculum do not match. Content alignment does not exist.

**Context/Format Alignment**

**Context/format alignment** refers to teaching the **way** the content is tested. The format of the assessment item is taught as well as the content of the item. Currently in our state, it is very important that the format of test items teachers use for assessing instruction – multiple-choice or open-ended items – should be the same types which appear on end-of-grade or end-of-course tests. When students encounter new or unfamiliar formats on the test, they often become frustrated by the format and do not attempt to answer or respond to the item.

Consider also the zipper example used in the first session. The teeth need to be aligned before starting to zip the jacket. Before the end-of-grade tests are given, teachers can use *Item Bank Testlets* to familiarize students with the format of items used on the tests. When teachers intentionally and routinely plan for and employ context alignment by modeling the format and types of assessments used on tests, students perform better on the tests.

**Curriculum Coordination**

Transparency - Coordination/ Articulation

To ensure adequate alignment of the curriculum, coordination and articulation need to occur, in addition to focusing on content and context alignment. Curriculum coordination refers to the lateral or horizontal focus and connectivity within a school or school district. For example, a view of all sixth-grade science classes hopefully would reveal a common focus and connectivity present (though not necessarily identical). The extent of similarity – that is, focus and connectivity – would be expected to vary some as the teachers adapted the content to be taught according to the differences in the learners in their classes. Coordination would occur because all sixth-grade teachers were focusing on the same content – that specified in *The Standard Course of Study*; however, the pacing of instruction in each class might vary. Coordination needs to be in place classroom to classroom within the same grade level at each school throughout the district. Consistency is a synonym for coordination.

**Curriculum Articulation**

Curriculum articulation refers to the focus and vertical connectivity in a school or school system. This means that there is continuity of the curriculum from grade to grade and from school to school. The curriculum at any one grade level, for any content area, is part of a thirteen-year program. As teachers plan for learning at one level, they need to consider the types of experiences students are expected to have had before and the anticipated experiences they will have in the future. This is vertical articulation of the curriculum. If teachers follow the scope and sequence outlined in *The Standard Course of Study*, articulation of the curriculum should occur in North Carolina schools. Continuity is a synonym for articulation.

**Coordination/ Articulation Issues**

If there is to be coordination and articulation of the curriculum in schools and schools systems, then teachers must talk and plan together. They cannot function in isolation without jeopardizing the integrity and intent of curriculum design and delivery.

**Coordination Examples**

Grade-level planning for all fourth grade social studies teachers within a school and in all schools across the district can ensure that all teachers are focusing on the intended curriculum – the study of North Carolina.

Similarly, middle school English language arts teachers should

engage in collaborative planning sessions to ensure that all are preparing students to write on a variety of topics in more than one mode. Simply stated, coordination efforts require teachers to consider this question: Are we all doing the same thing?

**Articulation Examples**

Likewise, teachers need to plan and work together across grade levels and schools to ensure articulation of the curriculum. This means that there are no gaps in the curriculum, moving from the primary to the elementary to the middle and to the secondary levels. The spiraling nature of the curriculum for most content areas promotes continuity K-12. For example, the mathematics curriculum in North Carolina has four common strands which spiral through the curriculum K-12. Foundations for mathematical concepts are built in early grades and developed in later years to allow students to be able to perform complex problem-solving tasks.

*The K-12 Computer/Technology Skills Standard Course of Study* has three goals which generally apply K-12. Objectives under each of the three goals describe the progressive development of knowledge and skills in six strands. These skills are developed over time and can and should be used in all content areas. The same is true for the Information Skills curriculum.

A goal of curriculum articulation is to eliminate or minimize overlap or duplication of content delivery across grade levels or courses. Articulation aims to ensure that all teachers are teaching the appropriate content at the appropriate level. Simply stated, articulation efforts require teachers to consider this question: Who is doing what at each level?

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**Cautions**

It is possible to have curriculum coordination in place without dealing with the issues of articulation. For example, all teachers in one grade or subject could be focused and connected without working with teachers at the next grade or level. The same disconnect could exist between schools within the same district.

Considering recent trends to increase site-based management and decision-making, as well as the current focus on local flexibility, teachers and administrators should be careful not to allow isolation and building-to-building autonomy to prohibit coordination and articulation efforts.

---

**Flexibility**

In addition to coordination and articulation, to be effective in schools a curriculum must have a third essential characteristic – flexibility. A curriculum must provide for flexibility in adaptation as teachers interact with students. Flexibility means that the curriculum must be open to some interpretations in terms of how and under what classroom circumstances the content is most optimally taught. This means that the curriculum must be capable of being changed by altering the sequencing and pacing of its delivery without fundamentally altering its design fidelity.

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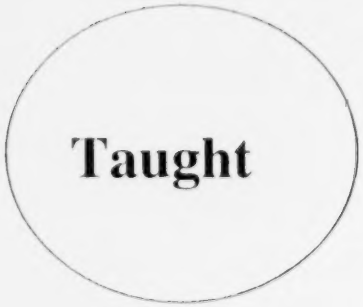
## Fenwick W. English

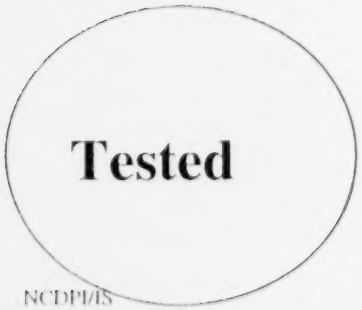
Fenwick English is a professor of educational administration in the College of Education at the University of Kentucky. He is a former middle school principal, assistant superintendent of schools in Florida, and a New York superintendent of five years. He has worked nationally and internationally for more than twenty years in school leadership. English was a partner in the international accounting and consulting firm of Peat, Marwick, Mitchell, Main, and performed organizational studies and curriculum audits in some of the nation's largest school systems. He has been a program presenter and trainer of school leaders for the American Association of School Administrator, Association of Supervision and Curriculum Development, the National Association of Secondary School Principals, and the National School Boards Association. He received his B.S. and M.S. from the University of Southern California and his Ph.D. from Arizona State University.

## Section II Activity 4
## Transparency - Curriculum Management Terms

**Curriculum – the work plan**




**Teaching – the work**




**Testing – the work measurement**

# What Curriculum Must Do in Schools

- **Focus** (identify what is essential)

- **Connect** (reinforce complex learning to mastery within and across grade levels and schools)

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Section II Activity 4
Transparency

# Two Aspects of Curriculum

- Design
- Delivery

**Design - refers to the development of curriculum**

**Delivery - refers to the implementation of curriculum**

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## Curriculum Design Alignment:

- The relationship between the curriculum (the work plan) and the test (the work measurement)

## Curriculum Delivery Alignment:

- The relationship between the curriculum (the work plan) and the instructional strategies (the delivery)

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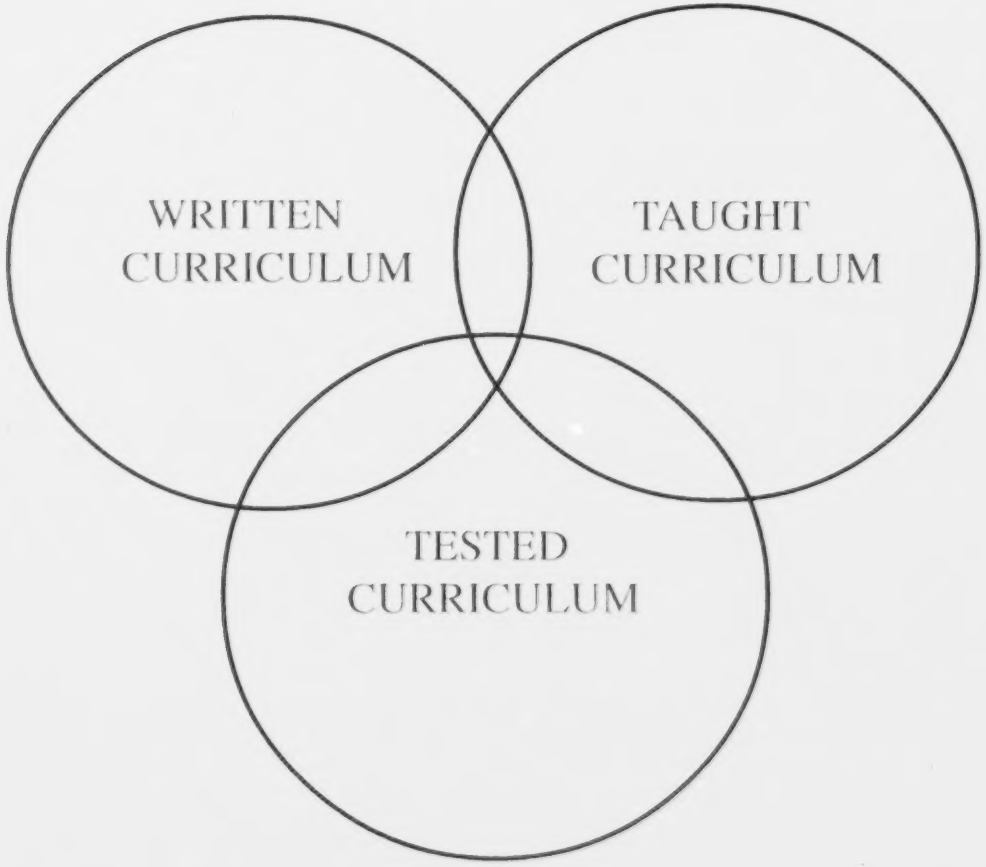
## Section II Activity 4
## Transparency - Curriculum Alignment

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Section II Activity 4
Transparency

# Two Levels of Alignment

- **Content Alignment: teaching what is tested**

- **Context/Format Alignment: teaching the way content is tested**

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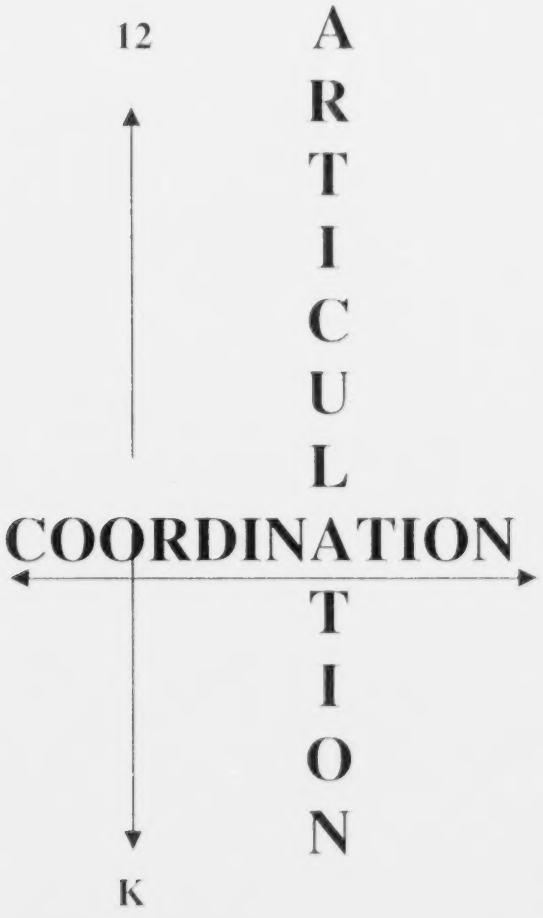
## Section II Activity 4
## Transparency – Articulation/Coordination

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# SECTION II: ACTIVITY 4
# Handout – Curriculum Alignment: Key Terms and Concepts Defined

**Specialized vocabulary**

Curriculum alignment, like many other processes in education, uses a specialized vocabulary. Although most of the terms are familiar to educators, they have specific or unique definitions when applied to the alignment process.

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**Key terms defined**

Listed below are key words and concepts defined as they apply to curriculum management and alignment.

- **Teaching** - the work
- **Curriculum** - the work plan
- **Test** - the work measurement
- **Learning** - the outcome of the work
- **Instruction** - focused and connected or systematized teaching
- **Focus** - to identify what is essential
- **Connect** - to reinforce complex learning to mastery within and across grade levels and schools
- **Coordination** - horizontal alignment ; coordination or consistency classroom to classroom within the same grade level and school to school within a district
- **Articulation** - vertical alignment; continuity across grade levels within a school and among schools within a district
- **Design** - the development of curriculum

- **Delivery** - the implementation of curriculum

- **Curriculum alignment** - the process of aligning or bringing into proper relationship three aspects of curriculum: the written, the taught, and the tested curricula

- **Written curriculum** - refers to what should be taught

- **Taught curriculum** - refers to what is being taught

- **Tested curriculum** - refers to what is being tested and how it is being measured

- **Content alignment** - teaching what is tested

- **Context alignment** - teaching the way content is tested

- **Design alignment** - the relationship between the curriculum (the work plan) and the test (the work measurement)

- **Delivery alignment** - the relationship between the curriculum (the work plan) and the instructional strategies (the delivery)

- **Unity** - reducing the discrepancy between what is taught and what is tested; it is coordination alignment

- **Tightening** - bringing the written, taught, and tested curricula into closer alignment

- **Quality control** – curricular quality control requires: 1) a written curriculum capable of being translated into the work of teachers in classrooms, 2) a taught curriculum

shaped by the written curriculum, and 3) a tested curriculum consisting of the utilized assessment tools of pupil learning which are linked to both the taught and written curricula.

- **Frontloading**- establishing the fit by working from the curriculum to the test

- **Backloading**- establishing the fit by working from the test to the curriculum

- **Assessment** - gathering information to make decisions; the types of decisions to be made determine the types of information that needs to be gathered; the purposes of assessment also determine the types of assessments used, i.e., assessment for accountability, program evaluation, or classroom instruction

- ***The Standard Course of Study*** - the official, legal document that details what must be taught in every content area. It describes all the required course content and lists goals and objectives - grade by grade and course by course.

# SECTION II: ACTIVITY 5

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 30 minutes | • To apply terms and concepts learned in the mini-lecture to analysis of misalignment scenarios<br>• To discuss examples of misalignment generated by participants | • Whole Group<br>• Small Groups | • Transparencies: Directions for Analyzing ..., Scenario Ex. 1, Scenario Ex. 2<br>• Handout: Misalignment Scenarios<br>• Overhead projector |

**Describe Activity**

Participants will apply what they learned about curriculum alignment from the mini-lecture. Working in groups, they will analyze scenarios which describe examples of misalignment or inadequate alignment. Groups will identify the problem in each scenario and offer solutions.

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**Activity Directions**

Transparency – Directions for Analyzing Alignment Scenarios

Handouts – Misalignment Scenarios

Divide participants into groups by counting off or any other method of choice. Distribute handouts and assign a scenario to each group. (If the group is not large enough to adequately support a group for each scenario, divide into fewer groups and assign each group more than one scenario). Instruct groups to choose a recorder/reporter. Display the transparency that states directions for the activity as the trainer explains the process to the participants. Instruct groups to follow these steps:

- Read the scenario.
- Identify the alignment problem(s).
- State the problem(s) using the appropriate terms as presented in the mini-lecture and included on the handout.
- Offer solutions to the problem(s) by stating specific changes that need to occur.
- Report the group's decisions to the whole group.



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**Model the Process**

Use the examples on the transparency to model the process. Read the scenario aloud as participants read it from the transparency. Pose questions to involve participants. Ask for volunteers to respond. Affirm correct responses. Provide sustaining feedback by posing prompting or probing questions if no response or an incorrect response is given.

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**Show Example 1**

Transparency – Scenario Example 1

**Scenario Example 1**

- In 1973, teachers in North Carolina were expected to teach the content specified in *The Standard Course of Study* (*SCS*).
- The California Achievement Test (CAT) was used to evaluate student achievement.
- At some grade levels, the content assessed on the CAT was not the same as the content specified in the *SCS*.

**Pose Questions**

Ask for volunteers to identify the alignment problem. Restate an appropriate response as follows: ,

**Restate Responses**

"The problem is that teachers are teaching one thing (*SCS* content) and testing something else (CAT content)."

Ask for volunteers to identify the type of misalignment illustrated. Restate an appropriate response as follows:

"This is an example on content misalignment."

As for volunteers to propose solutions to the problem. Restate an appropriate response as follows:

"A solution to the problem of content misalignment would be to use an assessment based on the content of the SCS, such as the current end-of-grade tests."

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**Scenario Example 2**

**Show Example 2**

Transparency – Scenario Example 2

- Primary math teacher M typically used the following format to teach addition and subtraction: 1) 2 / +2 2) 5 / -2
- This format was used in the textbook problems assigned for homework, as well as in teacher-made worksheets used for class work.
- When students were given a standardized test like the CAT, two formats were used for addition and subtraction problems:

  1) 2+2= __ 2) 6+2= __ 3) 8 / -5 4) 7-3= __

  5) 3 / +4 6) 9-1= __ 7) 6 / +1 8) 4-3= __

- When both formats (horizontal and vertical) were used, many students did not attempt to solve the problems presented in the unfamiliar horizontal format.

---

**Pose Questions**

Ask for volunteers to identify the alignment problem. Restate an appropriate response as follows:

**Restate Responses**

"The problem is that the teacher used a vertical format to teach addition and subtraction and the test used both vertical and horizontal formats to assess student work."

Ask for volunteers to identify the type of misalignment illustrated. Restate an appropriate response as follows:

"This is an example on context misalignment."

As for volunteers to propose solutions to the problem. Restate an appropriate response as follows:

"A solution to the problem of context misalignment would be for the teacher to model both formats with students if he knows both will be used on the test."

| | |
|---|---|
| **Check for Understanding** | After modeling the process, check for understanding before moving on to the group work. |
| **Form Groups & Assign Scenarios** | If there are no questions or concerns, form groups and assign scenarios to groups. Remind each group to select a recorder/reporter. |
| **Set Timer** | Tell groups they will have 5 minutes to complete the assignment. |
| **Groups Report** | After completing the group task, each group should report by having their recorder read the scenario, state the problem(s), identity the type(s) of misalignment, and state the groups' solution(s) to the problem. |
| **Make Connections** | After all groups have reported, ask for volunteers to give examples of misalignment they have experienced or observed. As a whole group, clarify the type of misalignment that occurred. Ask how the problem was solved. If the situation was not resolved, discuss what could have been some solutions. |

Section II Activity 5

Transparency

# Directions for Analyzing Alignment Scenarios

- Read the scenario.
- Identify the alignment problem(s).
- State the problem(s) using the appropriate terms as presented in the mini-lecture and included on the handout.
- Offer solutions to the problem(s) by stating specific changes that need to occur.
- Report the group's decisions to the whole group.

Section II Activity 5

Transparency

# Scenario Example 1

- In 1973, teachers in North Carolina were expected to teach the content specified in *The Standard Course of Study* (*SCS*).

- The California Achievement Test (CAT) was used to evaluate student achievement.

- At some grade levels, the content assessed on the CAT was not the same as the content specified in the *SCS*.

## Section II Activity 5

## Transparency

# Scenario Example 2

- Primary math teacher M typically used the following format to teach addition and subtraction:

1) 2 + 2

2) 5 - 2

- This format was used in the textbook problems assigned for homework, as well as in teacher-made worksheets used for class work.

- When students were given a standardized test like the CAT, two formats were used for addition and subtraction problems:

| | |
|---|---|
| 1) 2 + 2= __ | 5) 3 + 4 |
| 2) 6 + 2= __ | 6) 9 - 1= __ |
| 3) 8 - 5 | 7) 6 + 1 |
| 4) 7 – 3= | 8) 4 - 3= __ |

- When both formats (horizontal and vertical) were used, many students did not attempt to solve the problems presented in the unfamiliar horizontal format.

# Section II Activity 5
# Handouts
# Misalignment Scenarios

Scenario 1

- Teacher X typically designs tests using multiple-choice, true/false, and fill-in-the-blank questions.
- Teacher X's students have performed poorly on the end-of-course test which requires students to interpret charts and graphs, draw inferences from passages, and synthesize information.

Problem(s):

Type(s) of misalignment:

Solution(s):

Scenario 2

- Charter School C uses a nationally-developed curriculum.
- The new principal decides to give the NC Grade 3 Pretests of Reading Comprehension and Mathematics to all third graders at the beginning of the year.
- The principal plans to give the end-of-grade tests in reading and mathematics at the end of the year.
- The principal plans to report growth as determined by comparing student performance on the pre-tests and the end-of-grade tests.

Problem(s):

Type(s) of misalignment:

Solution(s):

Scenario 3

- School District D has purchased a test of basic skills from another state.
- Teachers in District D use *The North Carolina Standard Course of Study* as the basis for instruction.
- The district selected a basal reading series not on the state adopted textbook list.

Problem(s):

Type(s) of misalignment:

Solution(s):

Scenario 4

- Teachers in School S use textbooks as their sole basis for instruction.
- Teachers have developed a yearly pacing guide based on the text used in each grade.
- Teachers use the tests that accompany the textbook for classroom assessment.

Problem(s):

Type(s) of misalignment:

Solution(s):

Scenario 5

- Because US history teacher T has a special interest in the Holocaust, he usually does a six-week unit on it in addition to other units on the WW II era.
- Teacher T's students traditionally perform poorly on the last two goals of US History curriculum, as measured by the US History EOC.

Problem(s):

Type(s) of misalignment:

Solution(s):

Scenario 6

- The North Carolina sixth grade social studies curriculum focuses on the Eastern Hemisphere – Europe and the former Soviet Republics.
- Sixth grade teachers selected a textbook which also includes two units on the Asian nations of China and Japan.
- The teachers have developed a yearly pacing guide which includes all the units in the textbook.

Problem(s):

Type(s) of misalignment:

Solution(s):

Scenario 7

- The English language art curriculum specifies that students read and react to a variety of genre each year.
- Elementary English language arts teacher E uses mostly narrative selections in lessons she designs.
- Teacher E's students experience difficulty on the end-of-grade reading test when they are required to respond to various types of expository text.

Problem(s):

Type(s) of misalignment:

Solution(s):

**Scenario 8**

- **Teacher N is a new teacher who has come to North Carolina from another state.**
- **In November, while attending a program for beginning teachers, Teacher N asked questions about the content to be covered in second grade science.**
- **At this meeting, Teacher N first learned of the existence of *The Standard Course of Study*.**
- **Teacher N had been given a textbook and ancillaries only at the beginning of the year.**

**Problem(s):**

**Type(s) of misalignment:**

**Solution(s):**

**Scenario 9**

- **The Theater Arts curriculum specifies that playwriting be addressed in arts electives at the high school level.**
- **High School Theater Arts Teacher A has little experience in playwriting and therefore omits that content and process in his instruction for the course.**

**Problem(s):**

**Type(s) of misalignment:**

**Solution(s):**

Scenario 10

- Kindergarten Teacher K teaches coin identification and recognition.
- Students in Teacher K's class do not understand values of coins yet.
- *The Standard Course of Study* in mathematics specifies that instruction on coin identification and recognition will take place in second grade when students are developmentally ready to understand value and exchange of money.

Problem(s):

Type(s) of misalignment:

Solution(s):

Scenario 11

- Science teachers met to discuss the curriculum. One teacher per grade K-8 participated.
- Elementary Teacher E described a unit she teaches on electricity.
- Middle School Teacher M commented that she also teaches the same unit on electricity, focusing on the same goals and objectives.
- Middle School Teacher M says students who come to her from Teacher E's feeder school routinely complain that "we've already had this stuff."

Problem(s):

Type(s) of misalignment:

Solution(s):

# SECTION II: ACTIVITY 6

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 30 minutes | • To explain two ways curriculum alignment can be established | • Whole Group<br>• Small Groups | • Trainer Notes: Establishing Curriculum …,<br>• Transparencies: Two Ways to Establish …, Alignment Models, Common Situations, Design/Delivery<br>• Overhead projector |

**Describe Activity**

The trainer will present a brief mini-lecture to explain the two ways curriculum alignment can be established.

**Activity Directions**

Use transparencies to guide the mini-lecture and trainer notes to provide explanation.

Transparencies

Notes – Establishing Curriculum Alignment

# SECTION II: ACTIVITY 6

## Trainer Notes – Establishing Curriculum Alignment

**Curriculum Alignment**

Curriculum alignment is a process to improve the match between the formal instruction that occurs in the school and the classroom and that which any test will measure. There are two ways this alignment can be established.

**Frontloading**

Transparency – Two Ways to Establish Curriculum Alignment

The first way curriculum alignment can be established is through a process called frontloading. This refers to the concept of design alignment in which the curriculum and the test(s) are "matched." One would begin the matching process by first writing the curriculum and then selecting, adapting, or developing the test that "fits" the curriculum (or is aligned with it). To engage in frontloading, an entire curriculum must be developed before alignment to any test can occur. This means that frontloading is the most time-consuming and expensive way to establish alignment.

**Teaching to the Test**

When the process of frontloading is used, the issue of "teaching to the test" usually arises. If a school district writes a local curriculum, and then develops a local test to assess whether or not students have learned that local curriculum, they are also "teaching to the local test." If the curriculum and the test are aligned, teaching to the test is inevitable and desirable because the curriculum is the test. The extent to which any test is useful in providing feedback for reteaching the curriculum is the extent to which the test measures the curriculum in the first place.

Teaching to the test should not be viewed as wrong or unethical when the curriculum and test match. Coaches teach *during* the test. They monitor performance, give feedback, and adjust instruction throughout the game or "test." In fact, with the current emphasis on end-of-grade and end-of-course tests as components of North Carolina's student accountability plan, "teaching to the test" not only makes sense, it is also a necessity. Many have characterized it as a "matter of survival" since students and schools are "rated and ranked" on the basis of test scores.

**Examples of Frontloading**

Frontloading, as defined as establishing the "fit" by working from the curriculum to the test, is the process currently used in North Carolina. The curriculum, or *The Standard Course of Study*, is written first. Then the end-of-grade and end-of-course tests are developed to align to the curriculum. If teachers design and deliver instruction based on the state curriculum, they will be teaching to the state tests. The desired fit between the curriculum and the test will be established.

**Backloading**

Transparency – Two Ways to Establish Curriculum Alignment

The other way curriculum alignment is established is by backloading. This is the process of beginning with the test and working back to the curriculum. In this case, test developers are also the curriculum writers. It means the test becomes the curriculum. There will always be 100% alignment because the curriculum to be taught is derived from the test to be given.

The major advantage to backloading is that it is quick and relatively inexpensive compared with the frontloading process. The reason is that an entire curriculum does not have to be written before alignment can take place.

**Teaching the Test**

As with frontloading, the issue of teaching to the test arises also when backloading is used to establish alignment. Backloading is often considered to be "teaching the test," since the test becomes the curriculum.

**Examples of Backloading**

The longstanding practice of giving a spelling test on Friday is an example of backloading. The list of words to be tested on Friday are taught and practiced all week. The words to be tested that week are the curriculum for that week. Advanced Placement tests are also examples of backloading. Teachers know the content of the test so it becomes the curriculum for that course. A familiar example of backloading is the written test for a driver's license. A test preparation booklet is available for study before the test. It specifies the content to be tested.

Preparation courses for tests such as the Scholastic Aptitude Test (SAT), the Law School Admissions Test (LSAT), and the Miller Analogies Test (MAT) are all examples of backloading. The context or format of these tests, and the general (although not exact) content of these tests is known and therefore becomes the taught curriculum.

**Backload or Frontload?**

There are some problems with backloading. The tests may not always assess the most important things to be taught. In addition, tests may assess or measure some things that the teacher does not think should be taught at the point of the assessment. Furthermore, if the purpose of the test is to classify learners in some way prior to instruction taking place, backloading may assist in the process of misclassification.

As stated previously, frontloading is the process currently used in North Carolina. The state curriculum is written and then state tests are developed based on that curriculum. When aligning instruction, teachers need to know if all the goals and objectives in the curriculum are tested. If so, backloading is the best fit and teachers will work from the test back to the curriculum. They will need to teach all of the curriculum because all of it is tested. If some objectives are not tested, frontloading can be done. Teachers will want to teach all of the curriculum although all of it will not be tested because they think some of the untested content is important.

Backloading should be considered an interim measure to improve test scores and not as any final determining factor of what should be in a curriculum in the first place. Determing what students should know and be able to do must always be a guiding principle for schools. That will involve the frontloading approach, and should remain dominant despite the existence of "high stakes" testing and all the negative consequences that result from their continued use.

**Tightening**

Transparency – Tight/Loose Alignment

**Unity**

Frontloading and backloading are processes for improving the match between the curriculum content and the test content. This means "tightening" the relationship between what become the written curriculum, the taught curriculum, and its alignment to the tested curriculum. Tightening the curriculum brings the three aspects into alignment or congruence. The lack of overlap between the three curricula is decreased. The aim is curricular unity. This means reducing the gap between what is taught and what is tested. It is coordination alignment.

---

**Tight or loose?**

Teachers and/or schools want to be tight or in close alignment on the following: coordination/consistency issues; articulation/continuity issues, mission and vision, and content goals and objectives.

Teachers and/or schools want to be loose or allow flexibility on the following: delivery/instructional strategies, choice of

instructional resources used, and pacing of instruction.

When considering issues of tightening or unity, teachers and/or schools need be able to answer these two questions:

Transparency – Common Situations to Consider Tightening

- What do we do to create improved levels of focus and connectivity?
- What do we do to maintain the required levels once in place?

(Appropriate activities for startup and maintenance listed on the chart are stated in broad, general terms. Have participants generate specific examples of each activity if needed).

**Quality Control**

An underlying principle of the alignment process is that of quality control. Quality control means that a target or goal (the written curriculum) becomes the basis for defining the work to be done (teaching) and both of these in turn are part of (or aligned to) the tested curriculum. A school can tighten the focus in any one of the three curricula; however, tightening does not work unless all three are aligned or in congruence.

**Alignment Example**

One of the best examples of tightening/unity is the work of athletic teams. Consider the operations of a basketball team and coaching staff. They prepare for the game (the test) by scouting the opposing team. This means they engage in design alignment. Coaches and players view game tapes to learn the plays (the work) their opponent uses. Based on these observations, they develop a game plan (a curriculum or work plan). In order to be successful during the game (the test), coaches and players work to tighten the fit between the game plan and its execution. Coaches teach to the test.

Transparency – Design/Delivery Alignment

Teams also engage in delivery alignment. They focus on tightening the fit between the game plan (work plan) and the plays used during the game (delivery strategies). Coaches and players continuously aim for unity and tightening during the game by providing feedback about performance. As noted previously, coaches are teaching during the test. They give feedback to players who adjust their strategies or plays accordingly. After the game, all will view the game tape. Based on their performance and the outcome of the game, adjustments will be made. New game plans will be formulated in preparation for the next game. Hopefully, unity will be achieved. The work plan (game plan) and the test (the game) will be aligned, thus achieving design alignment. The work

Transparency – Design/Delivery Alignment

plan (game plan) and the instructional strategies (game plays) will be aligned, thus achieving delivery alignment.

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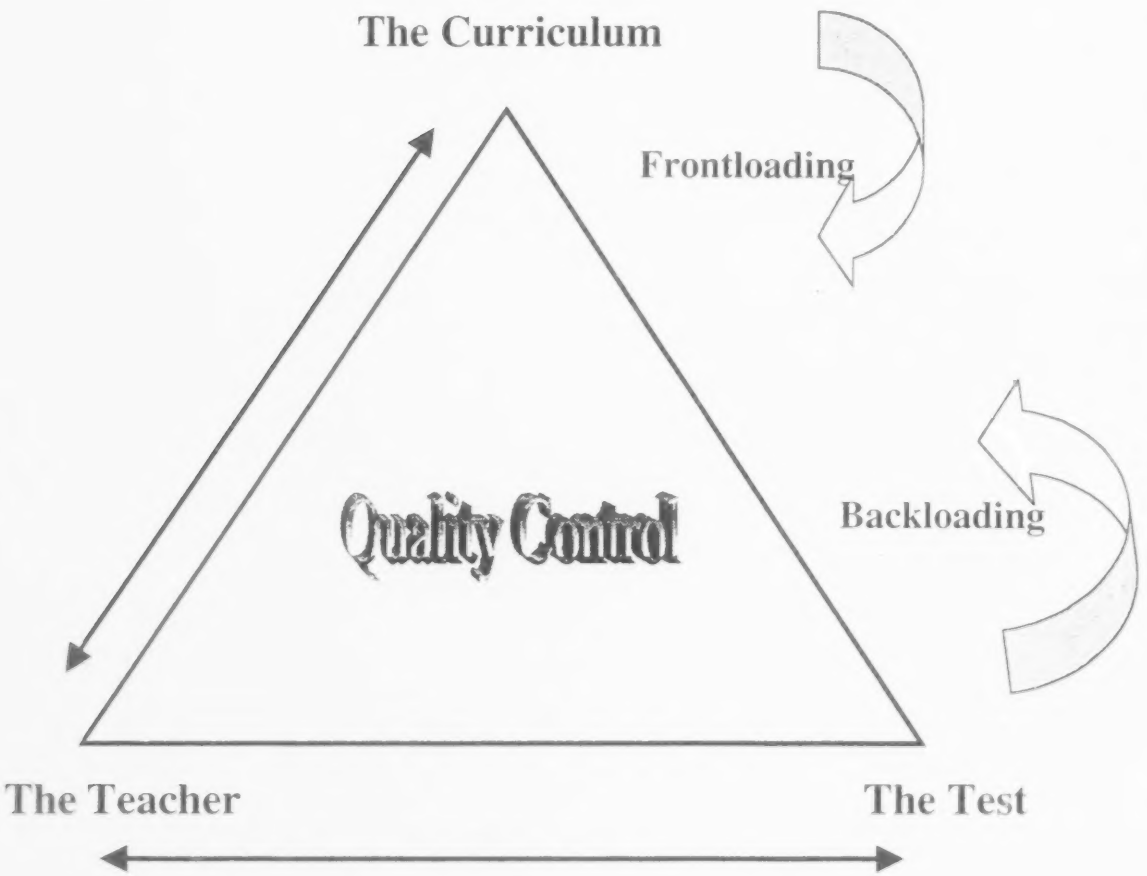
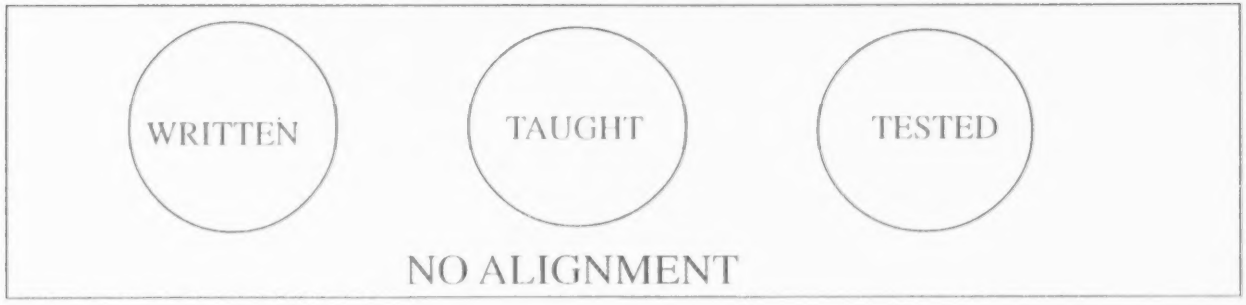
## Section II Activity 6
## Transparency - Two Ways to Establish Curriculum Alignment



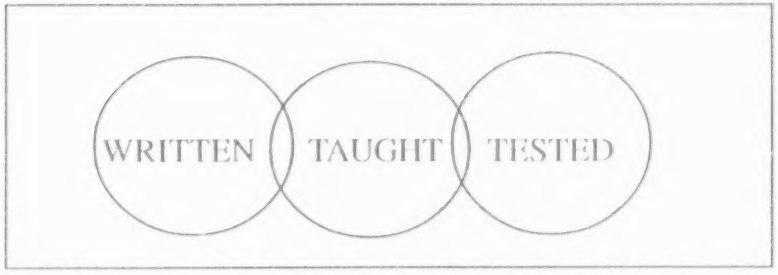

**Frontloading**: establishing the fit by working from the curriculum to the test

**Backloading:** establishing the fit by working from the test to the curriculum

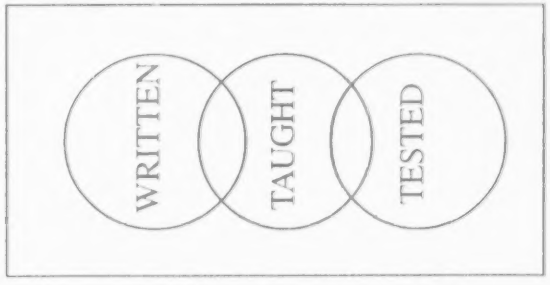
## Section II Activity 6
## Transparency - Alignment Models



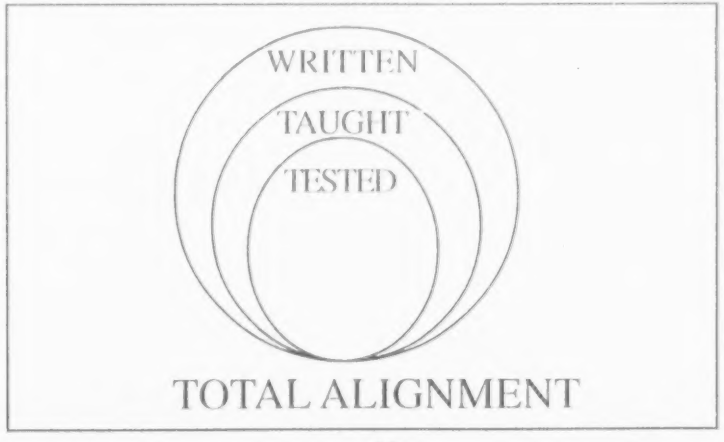

NO ALIGNMENT




LOOSE ALIGNMENT




TIGHT ALIGNMENT




TOTAL ALIGNMENT

# Section II Activity 6
# Transparency

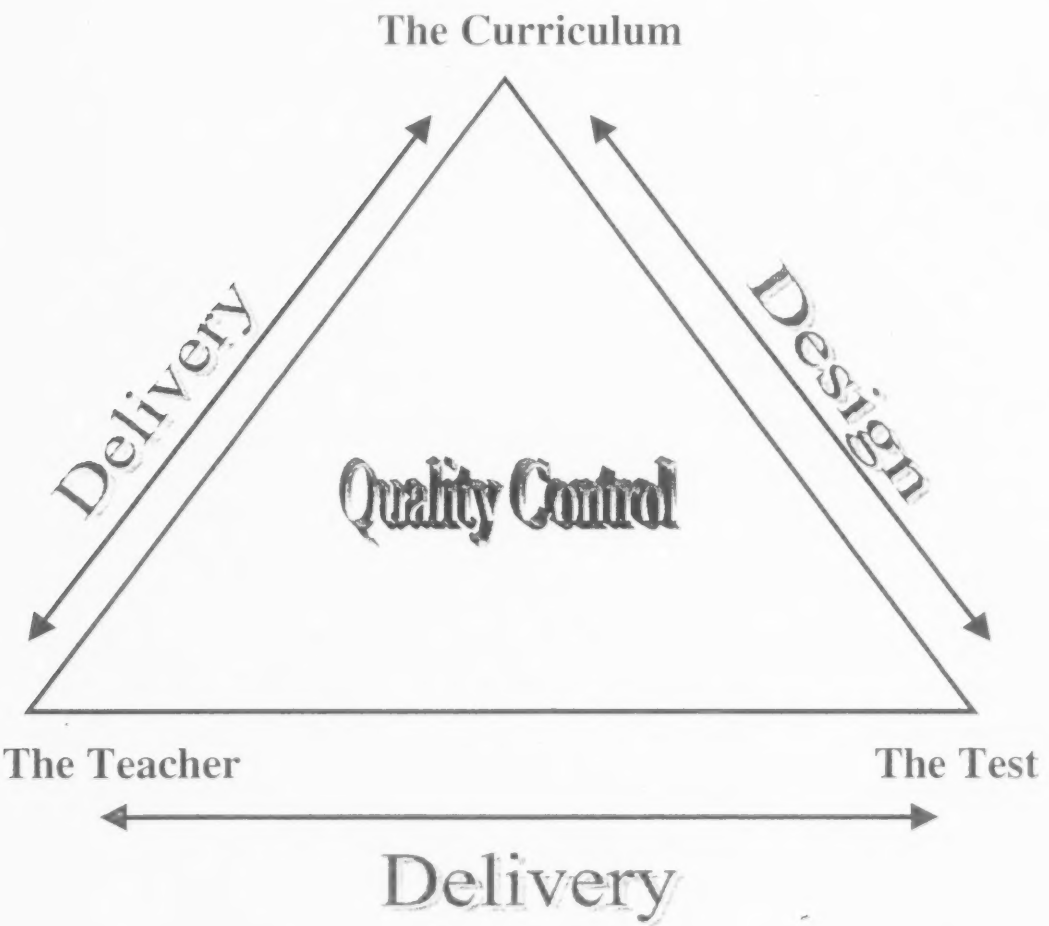
## Common Situations to Consider Tightening

| | *Startup* | *Maintenance* |
|---|---|---|
| **Design** | Curriculum development<br>Alignment<br>Frontload<br>Backload | Curriculum/textbook adoption<br>Testing |
| **Delivery** | Staff development<br>Supervision | Testing<br>Monitoring (alignment)<br>Supervision (alignment) |

## Section II Activity 6
## Transparency – Design/Delivery Alignment:

**Design Alignment:**

The relationship between the **curriculum** (the work plan) and the **test** (work measurement)




**Delivery Alignment**:

The relationship between the **curriculum** (the work plan) and the **instructional strategies** (the delivery)

# SECTION II: ACTIVITY 7

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 45 minutes | • To apply knowledge of curriculum alignment terms and concepts | • Whole Group<br>• Small Groups | • Handouts: Group Tasks<br>• Chart paper<br>• Markers<br>• Transparency: Directions for Group Tasks<br>• Overhead projector |

**Describe Activity**

Participants will apply knowledge of curriculum alignment terms and concepts to current conditions in their school and/or district by working in groups to respond to questions concerning alignment issues.

**Activity Directions**

Transparency - Directions For Group Tasks: Application Activity

Handouts – Group Tasks

Chart paper & markers

Divide participants into groups by counting off or by any other method of choice. Distribute handouts and assign a question to each group. Show transparency with directions for the group tasks as the trainer states the directions. Instruct groups to choose a recorder/reporter. Tell them they will have 10 minutes to discuss and prepare their responses to the questions. Each recorder/reporter should write the question and their group's response (listed in bullets) on chart paper. Inform groups that each will be allowed 3 minutes to present their response to the total group. After each reporter has shared the work of their group, add any other suggestions generated by the whole group. Participants may elect to make notes on the handout sheets for future reference as each group reports out. Post the charts around the training room.

Section II Activity 7
Transparency

# Directions for Group Tasks: Application Activity

- ✓ Form groups
- ✓ Elect recorder/reporter
- ✓ Read and discuss assigned question
- ✓ Using bullets, record group's responses on chart paper
- ✓ Report to whole group
- ✓ Post chart with responses
- ✓ Make notes on handouts as groups report (optional)

<u>Time Allowed</u>:

- Group discussion/chart preparation– *10 minutes*
- Group report to whole group – *3 minutes each*

# Section II Activity 7
# Handout - Group Tasks A

**Group 1**

**What key issues need to be addressed when grade, school, and district teams plan and work together?**

**Group 2**

**What needs to occur in your school and/or district in order to achieve articulation of the curriculum?**

**Group 3**

**What needs to occur in your school and/or district in order to achieve coordination of the curriculum?**

# Handout - Group Tasks B

**Group 4**

**What needs to occur in your school and/or district in order to achieve content alignment of the curriculum?**

**Group 5**

**What needs to occur in your school and/or district in order to achieve context/format alignment of the curriculum?**

**Group 6**

**When is backloading preferable?**

**What problems can be addressed in North Carolina schools by using the backloading approach to curriculum?**

# Handout - Group Tasks C

Group 7

When is frontloading preferable?

What problems can be addressed in North Carolina schools by using the backloading approach to curriculum?

Group 8

What are some specific strategies for tightening the relationship of the written curriculum, the taught curriculum, and the tested curriculum?

Group 9

What is the difference between "teaching to the test" and "teaching the test?"

Is either appropriate? If so, when?

# SECTION II: ACTIVITY 8

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 15 minutes | • To assess understanding of topics after instruction | • Individual<br>• Whole Group | • Chart paper - consensograms<br>• Adhesive dots – 1 color (different color from dots used in Activity 3) |

**Describe Activity**

Participants will assess their understanding of topics after instruction by rating their knowledge level on a consensogram.

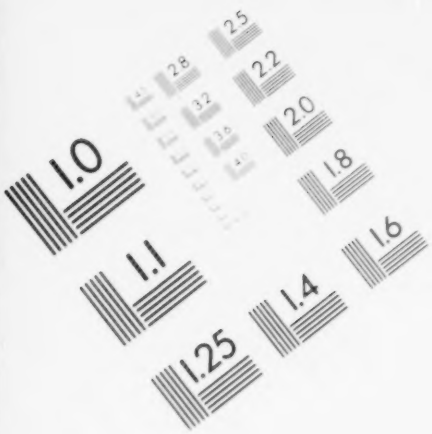
**Activity Directions**

Post consensograms completed during Activity 3. Using a different color dot than those used in Activity 3, give participants one dot per consensogram (8 dots). Instruct them to assess their current understanding of the concepts or topics on each consensogram. Direct participants to indicate their level of understanding by placing a dot on the second line above the appropriate number.

**Debrief and Summarize**

The trainer should focus attention on each consensogram by noting the change in levels of understanding indicated in the bar graph of dots. Involve participants in making summarizing statements about the changes noted.

Review and reteach according to the need indicated by the ratings.



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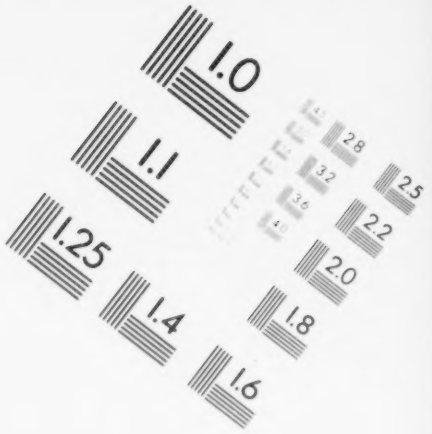

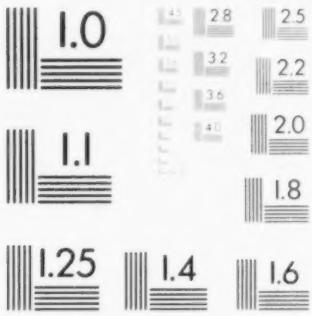


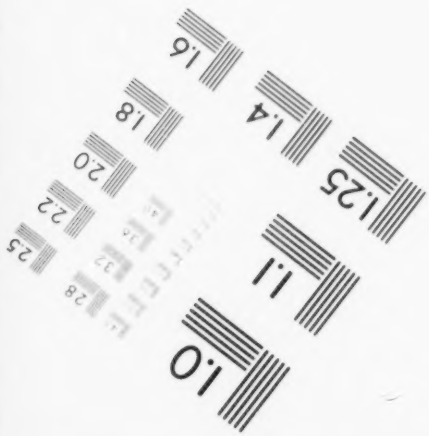


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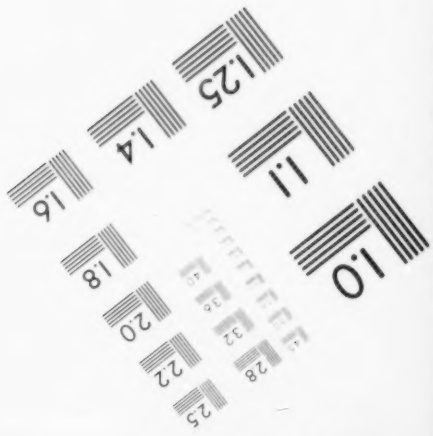

# Section III: Curriculum Alignment in North Carolina

# SECTION III: ACTIVITY 9

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 20 minutes | • To analyze a unit<br>• To rate clarity & completeness of unit components<br>• To note needed revisions to unit | • Individual<br>• Whole Group | • Handouts: Unit Analysis Activity, Self-Assessment Activity<br>• Transparencies: Unit Analysis Activity, Self-Assessment Activity<br>• Overhead Projector |

**Describe Activity**

Participants will analyze an instructional unit they have designed. They will self-assess the extent to which their unit addresses major components of unit design.

**Give prior instructions**

Prior to this session, instruct participants to bring a unit they have recently used or plan to use.

**Analyze unit components**

Teacher-designed unit

Handout/Transparency - Unit Analysis Activity

Distribute the Unit Analysis Activity handout. Have participants analyze the main components of the unit by responding to the ten questions on the handout. To assist visual learners, display the transparency while explaining the assignment. Allow about 10 minutes for independent work.

**Self assess**

Handout/Transparency – Self-Assessment Activity

After participants have responded to the questions, distribute the Self-Assessment Activity handout. Instruct participants to assess the extent to which their unit clearly and completely addresses the information asked for in each question. Have them assign a rating of 0-3 to each question using the scale provided. To assist visual learners, display the transparency while explaining the task.

**Reflect and adjust**

Ask participants to reflect on the unit analysis activity by identifying 2-3 areas in the unit which need adjustment. Have them note on the unit what and where revisions are needed.

**Summarize**

Remind participants that individual lesson plans and units should be reviewed after each has been used with students. Notes should be made on what worked well and what might need to be adjusted. This process of review and revision causes units to be "living documents" that change over time. New resources will be substituted for outdated ones; activities will be modified based on



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interest and response of students; assessment methods will be adjusted to match new learning targets. Because teaching and learning are recursive processes, both require continuous assessment and adjustment.

# Section III Activity 9
# Handout - Unit Analysis Activity

**Review a unit you have designed and respond to the following questions about that unit:**

_____ **1. What is the topic of the unit?**

_____ **2. What are the desired outcomes for the unit - what do you want students to know and be able to do?**

_____ **3. During which grading period will the unit be used?**

_____ **4. What is the approximate amount of time needed to complete the unit - in days or weeks?**

_____ **5. What resources will students need access to during the unit?**

_____ **6. What resources will teachers need access to during the unit?**

_____ **7. What teaching strategies will be used in the unit?**

_____ **8. What types of activities will students be engaged in during the unit?**

_____ **9. What types of assessments will be used in the unit?**

_____ **10. What goals and objectives in *The Standard Course of Study* are addressed in the unit?**

# Section III Activity 9
# Handout - Self-Assessment Activity

- **Rate the extent to which your unit clearly and completely addresses the information asked for in each question.**

- **Assign a rating of 0 - 3 to each question using the scale below:**

  **0 No information is provided**

  **1 Information is incomplete and unclear**

  **2 Partial information is provided but lacks clarity**

  **3 Information is complete and clear**

- **Put the rating for each question in the blank to the left of the number.**

## Section III Activity 9
## Transparency - Unit Analysis Activity

**Review a unit you have designed and respond to the following questions about that unit:**

_____ **1. What is the topic of the unit?**

_____ **2. What are the desired outcomes for the unit - what do you want students to know and be able to do?**

_____ **3. During which grading period will the unit be used?**

_____ **4. What is the approximate amount of time needed to complete the unit - in days or weeks?**

_____ **5. What resources will students need access to during the unit?**

_____ **6. What resources will teachers need access to during the unit?**

_____ **7. What teaching strategies will be used in the unit?**

_____ **8. What types of activities will students be engaged in during the unit?**

_____ **9. What types of assessments will be used in the unit?**

_____ **10. What goals and objectives in *The Standard Course of Study* are addressed in the unit?**

## Section III Activity 9
## Transparency - Self Assessment Activity

- **Rate the extent to which your unit clearly and completely addresses the information asked for in each question.**

- **Assign a rating of 0 - 3 to each question using the scale below:**

  **0 No information is provided**

  **1 Information is incomplete and unclear**

  **2 Partial information is provided but lacks clarity**

  **3 Information is complete and clear**

- **Put the rating for each question in the blank to the left of the number.**

# SECTION III: ACTIVITY 10

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 50 minutes | • To examine sample alignment forms<br>• To identify the components of a comprehensive alignment form<br>• To create an alignment form for school/ grade/subject | • Small Group<br>• Whole Group | • Transparency: Dimensions of Curriculum Alignment<br>• Blank Transparencies<br>• Transparency pens<br>• Handouts – sample forms<br>• Overhead projector<br>• Chart paper<br>• Markers |

**Describe Activity**

Participants will review sample alignment forms, decide on components needed, and create a form to be used for their grade, subject, or school.

**Determine expectations**

- Prior to this session, determine from school and/or district decision-makers what the expectations are for aligning the curriculum. The trainer will need to know the following:
- Has alignment been done before at the school and/or district level?
- Do alignment documents currently exist?
- If so, are they used in all schools?
- What will be the timeline for the alignment project?
- How will work groups be structured:
  - total school faculty?
  - grade level groups?
  - subject area groups?

- How will the alignment format be determined:

  - by individual schools?

  - by individual grade levels?

  - by individual subject areas?

- Are end-of-grade and end-of-course test data available and have the data been disaggregated?

**Activity Directions**

Transparency – Dimensions of Curriculum Alignment (how/process shaded)

Inform participants that they are ready to begin the third dimension of curriculum alignment – the how or the actual process of alignment. Display the transparency with the **how** dimension highlighted.

**Announce expectations**

The trainer or a school leader will present the expectations for the alignment project to the group. Announce the following:

- the projected timeline for the project
- the composition of work groups
- the times and locations for work sessions
- how formats will be determined

**Assign groups**

Assign work groups according to how the alignment project will be conducted – by grade levels, by subjects areas, or whole school. If one form will be used for the whole school, divide into small groups at random or form groups across grade and subject levels.

**Review sample forms**

Instruct participants to review the sample alignment forms provided. They may also review other forms available to them.

**Decide criteria**

In work groups, discuss the desired components of an alignment form. After reviewing the samples, reach consensus on the group's criteria for an alignment form. Identify the specific components that the form should include.

**Create form**

Using the sample forms as resources and the criteria for components as a guide, create a form for the work group to use in their alignment project.

Chart paper/ markers
Blank transparencies/ pens

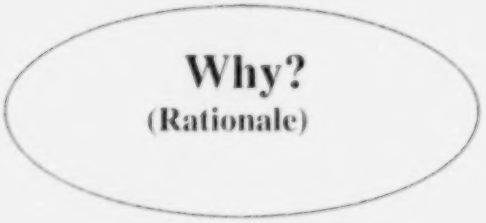
If grade level and subject area forms are developed, have each

group share their form with the whole group. Forms can be sketched on chart paper or a blank transparency for reporting to the group.

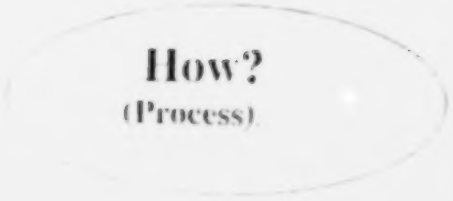
**Homework option**

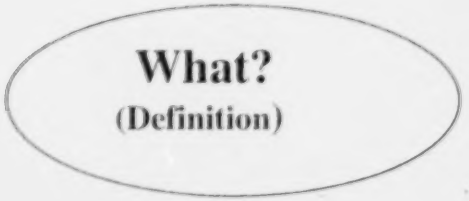
The trainer may opt to allow groups to design and share a rough draft of their form during the training session. A homework assignment can be made to create the form on the compute and to prepare copies for distribution to other groups at the next session.

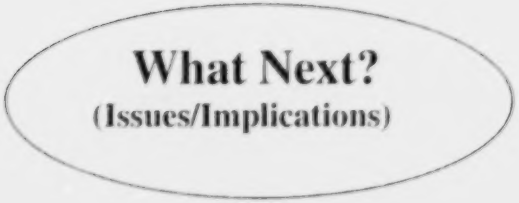
**Section III Activity 10**
**Transparency – Dimensions of Curriculum Alignment**




# Dimensions of Curriculum Alignment

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# SECTION III: ACTIVITY 11

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| See projected timeline for project | • To align the curriculum for each grade level and subject area | • Small Group<br>• Whole Group | • Handouts: Packet<br>• Alignment forms<br>• Curriculum documents<br>• Support documents<br>• Supplementary materials<br>• Lesson plans and units<br>• Classroom assessments<br>• Assessment data |

**Describe Activity**

Participants will work in assigned groups to align the curriculum.

**Activity Directions**

Working in their assigned groups, participants will complete the alignment forms designed for their school, grade level, or subject area.

**Provide resource**

Handout – Tools for the Task

Distribute the handout "Tools for the Task" which identifies resources needed for alignment. It also describes curriculum support documents available from the Publications Office of the Department of Public Instruction.

# Handout - Tools for the Task

**Guiding principle of curriculum alignment**

In order to teach the state curriculum and to align classroom activities with the curriculum, teachers must first have the necessary curriculum documents, textbooks, supplemental materials, information about state assessments, and training in how to use these resources to plan their instruction.

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**Resources needed for alignment**

- All teachers must have copies of the state curriculum for the subjects they teach.
- All teachers must have staff development to insure they understand the curriculum they teach.
- All teachers must have textbooks for their students that are aligned with the state curriculum and teacher's manuals for the subjects they teach.
- All teachers must have supplemental materials to teach required content not covered in state adopted texts.
- All teachers must have training in the use of aligned materials.
- All teachers must have training in the use of testlets and other materials to help students understand the format and kinds of questions as well as the content on state tests (context and content alignment).

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***The Standard Course of Study***

Curriculum alignment involves the use of a variety of materials. The state curriculum is the primary document of focus in the process. In North Carolina, this is *The Standard Course of Study*, the official document that details what must be taught in every content area. *The Standard Course of Study* describes all the required course content and lists goals and objective – grade by grade and course by course.

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**Optional curriculum documents**

*The Standard Course of Study* is the only curriculum document that teachers and schools are required to follow. All other documents are not mandated; they are merely suggested resources. While *The Standard Course of Study* identifies what must be taught, it does not specify how content is to be taught.

Support documents such as curriculum guides, handbooks, matrices, and resource listings contain suggestions and sample materials the teachers may use if they find them helpful.

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**Support documents**

The following are examples of some of the support documents currently available:

**Reference guides**

- Reference Guides for grades K-8 list the goals and objectives by grade for all subjects in *The Standard Course of Study*. This document puts in one place all the objectives for which a teacher at a given grade level is responsible. It can also be used by teachers to see what the content is for other grade levels.

**Reading/Writing Matrices**

- Reading and Writing Matrices K-12 are documents for teachers and parents that list by grade the reading and writing content students are supposed to receive.

**Math Matrices**

- Mathematics Matrices K-12 are documents for teachers and parents that list by grade the mathematics content students are supposed to receive.

**Social Studies Ready Reference Cards**

- Social Studies Ready Reference Cards K-5 are resources for teachers to use in planning for instruction. Cards list content goals and objectives, social studies skills, and organizing/guiding questions. Important economic and geographic terms and concepts are defined and the Five Themes of Geography are explained.

**Testlets**

- A number of test alignment materials are available. Testlets are sample test items that teachers can use to make students aware of the format (context alignment) and the types of content (content alignment) that are tested on state assessments. Testlets are available for grades 3-8 end-of-grade tests and for most secondary end-of course tests.

  Reading and math testlets for grades 3-8 can be ordered through DPI Publications Office. Phone: 1-800-663-1250.

  Science and Social Studies testlets for grades 3-8, English I, Algebra I, and US History can be ordered from LOTS. Phone: 919-515-4632.

**Classroom Assessment**

- Classroom Assessment: Linking Instruction and Assessment and the Study Guide for Classroom Assessment

**documents** that accompanies the manual are the documents for the classroom assessment initiative. These materials can also be ordered from the DPI Publications Office. Phone: 1-800-663-1250.

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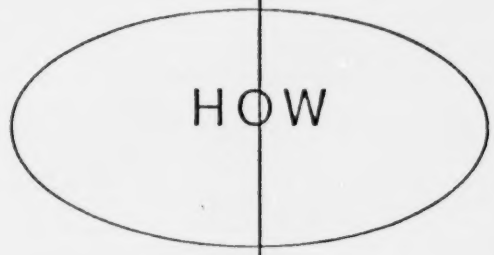
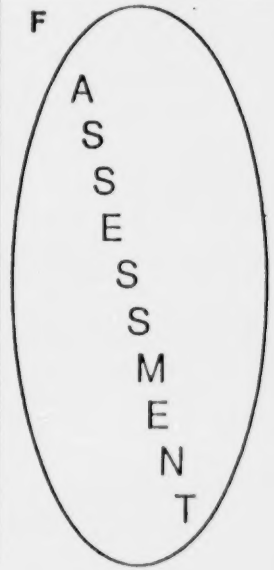
# CURRICULUM ALIGNMENT

Goal/Theme _____ Subject _____ Grade _____

| OBJECTIVE<br>Use No. or Write Out | PRIMARY SOURCE CORRELATION<br>Pages and Adequacy Code | OTHER RESOURCES<br>Description and Adequacy Code | STRATEGIES<br>BASIC/ENRICHMENT<br>Variety teaching strategies<br>Context, Taxonomy, Others | PACING<br>(Time Required)<br>Estimate coverage time frames | LOCAL/STATE ASSESSMENT<br>Teacher made EOC/EOG/<br>SAT/CAT, Others |
|---|---|---|---|---|---|
| A | B | C | D | E | F |



# CURRICULUM ALIGNMENT

| SUBJECT: | GRADE: | SCHOOL: | LEA: |
|---|---|---|---|

| GOAL | OBJECTIVES | INSTRUCTIONAL STRATEGIES | RESOURCES |
|---|---|---|---|
| 114 | | | 115 |

# CURRICULUM ALIGNMENT

GOAL/THEME: SUBJECT: GRADE: LEA:

| OBJECTIVE | TEXTBOOKS CORRELATION | OTHER RESOURCES | STRATEGIES BASIC/ENRICHMENT | PACING (TIME REQUIRED) | LOCAL/STATE ASSESSMENT |
|---|---|---|---|---|---|
| | | | | | |

116

117

# PACING GUIDE

COURSE:_____ TEACHER: _____

CIRCLE ONE: 1ST 9 WEEKS 2ND 9 WEEKS

| UNIT/TOPIC/GOAL | CORRELATION WITH NC STANDARD COURSE OF STUDY | RESOURCES |
|---|---|---|
| | | |

# CURRICULUM GUIDE

**TEACHER:** **CLASS:**

**UNIT NAME:** **AMOUNT OF TIME NEEDED:**

| UNIT OBJECTIVES | SCOS SL OBJECTIVES | VOCABULARY | STRUCTURES | RESOURCES |
|---|---|---|---|---|
| | | | | |



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# Pacing Guide

| WEEK | TOPIC | TEXT/CHAPTER | OUTSIDE RESOURCES |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



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## Curriculum Alignment Guide

Course Name _____ Course Number _____ Unit _____

Competency/Objective(s) _____

| | |
|---|---|
| Bulletin Board Ideas | |
| Computer Applications | |
| Curriculum Guide | |
| Demonstrations | |
| Field Trip Ideas | |
| Filmstrips | |
| Games | |
| Integration of Basic Skills | |
| Laser Disks | |
| Modifications for Special Needs | |
| Motivational Ideas | |
| Project Ideas | |
| Resource Persons/Speakers | |
| Skits / Role Play | |
| Student Workbook | |
| Textbook | |
| Text References (other) | |
| Transparencies | |
| Videos | |
| Work-based Learning Experiences | |
| DECA / FBLA Activities | |



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# Appendix G: Curriculum Guide Forms

## Curriculum Guide

**Subject:** _____

| Goals and Objectives | SCS Correlation | Resources/Text/ Activities | Time Frame | Assignments | Assessment |
|---|---|---|---|---|---|
| | | | | | |

New Mexico Department of Education

# BUILDING BRIDGES:

STANDARDS, INSTRUCTION, AND ASSESSMENT IN THE CLASSROOM

CEADP

NMHU HIGHLANDS UNIVERSITY

## Sample Curriculum Alignment Matrices

## Language Arts
Grades K-4

Click below to download:

Language Arts K-4

(In Microsoft Word 6.0 format)

**Language Arts Standard 1** - Students will understand and use Language Arts for communication.

**Benchmarks** - As a result of Language Arts instruction in Grades K - 4, the student will:

| Benchmarks | Where is this concept found in our curriculum? | What is missing? |
|---|---|---|
| • develop an awareness of and use a variety of language resources; and | | |
| • acquire, develop, and use vocabulary and linguistic skills to communicate effectively. | | |

**Language Arts Standard 2**: Students will understand and use Language Arts as a learning tool.

**Benchmarks** - As a result of Language Arts instruction in Grades K - 4, the student will:

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| Benchmarks | Where is this concept found in our curriculum? | What is missing? |
|---|---|---|
| • use Language Arts skills and knowledge in all curriculum areas; | | |
| • use language skills and knowledge in daily life; | | |
| • recognize relationships among topics in Language Arts study; and | | |
| • acquire critical thinking skills in listening, speaking, reading, and writing. | | |

**Language Arts Standard 3**: Students will listen and read for a variety of purposes.

**Benchmarks** - As a result of Language Arts instruction in Grades K - 4, the student will:

| Benchmarks | Where is this concept found in our curriculum? | What is missing? |
|---|---|---|
| • listen, react to, and retell conversations, drama, music, poems, and stories delivered live and through technology; | | |
| • read and retell stories; | | |
| • acquire vocabulary through listening, reading, observing, and interacting with others; and | | |
| • choose reading materials at an appropriate reading level for information gathering, enrichment, and other purposes. | | |

**Language Arts Standard 4**: Students will use a variety of listening and reading strategies appropriately.

**Benchmarks** - As a result of Language Arts instruction in Grades K - 4, the student will:

# Curriculum Resource Organizer

| Goals and Objectives | Textbook | Other Resources |
|---|---|---|
| **The learner will use the language of algebra.**<br><br>1.1 Evaluate algebraic expressions<br>1.2 Use formulas to solve problems.<br>1.3 Translate word phrases and sentences into expressions and equations and vice versa.<br>1.4 Use the associative, commutative, and distributive properties. | | |
| **The learner will perform operations with real numbers.**<br><br>2.1 Simplify real number expressions with and without a calculator<br>2.2 Determine the additive or multiplicative inverse of a number.<br>2.3 Determine the absolute value of expressions.<br>2.4 Raise a real number to an indicated power.<br>2.5 Write numbers in scientific notation and use this notation with the calculator.<br>2.6 Distinguish between rational and irrational numbers.<br>2.7 Find approximations for square roots with and without a calculator.<br>2.8 Simplify radical expressions.<br>2.9 Multiply two binomials which contain square roots.<br>2.10 Compare real number expressions. | | |

# SECTION III: ACTIVITY 12

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 30 minutes | • To discuss implications of alignment<br>• To plan next steps | • Small Group<br>• Whole Group | • Transparencies: Dimensions of Curriculum Alignment, Issues/ Implications of Alignment …<br>• Overhead Projector<br>• Handouts: Issues/ Implications…, Alignment of Curriculum and Assessment |

**Describe Activity**

Participants will discuss next steps for their school after the alignment project is completed.

**Activity Directions**

Transparency – Dimensions of Curriculum Alignment (what next shaded)

Inform participants that they are now ready to focus on the fourth dimension of curriculum alignment – the **what next** step - the issues and implications of curriculum alignment. Display the transparency with the **what next** dimension highlighted.

**Form groups**

Divide participants into groups. New groups can be formed or the same grade level and subject area group assignments from the previous session can be used. Tell groups to select a recorder/reporter.

**Discuss issues/ implications**

Instruct groups to discuss the issues related to and/or implications of having curriculum alignment in place and of not having the curriculum aligned for each of the following:

- Students
- Teachers
- Administrators
- Schools

- Districts/Communities

**Provide examples**

Provide examples of implications for each group as needed. The following are possible implications of alignment or misalignment for each group:

- Students – may determine if proficiency levels and promotion standards are met
- Teachers – may determine if they receive incentive bonuses
- Administrators – may determine if they receive incentive bonuses
- Schools – may determine if they receive incentive awards
- District/community – the schools' ratings (exemplary, low-performing, etc.) become "PR" issues in the community

Transparency – Issues/ Implications of Alignment Group Tasks

Handout – Issues/ Implications of Alignment Group Tasks

Show the transparency as the assignment is made. Refer groups to the handout to use for the group task. Inform groups they will have 15 minutes to complete the task.

**Groups report**

The reporter/recorder from each small group should be prepared to report to the whole group.

**Plan next steps**

After groups have reported their discussions, the trainer should summarize main points. Working as a whole group, instruct participants to generate strategies for monitoring and maintaining alignment once the initial process has been completed. An action plan for addressing maintenance can be created as a next step

**Revise alignment documents**

The trainer should emphasize the point that curriculum alignment is an on-going process. Once the initial alignment project has been completed for each grade and subject area, teachers will need to continuously revise their alignment documents. The process is a cycle that never ends. The alignment document must be revised when the curriculum is changed or revised and when new textbooks are adopted. As teachers acquire new resource materials and curriculum support documents, their alignments will need to be updated. Teachers need to adjust instruction based

on feedback from classroom assessments and state assessments.

**Classroom assessment initiative**

The trainer should inform participants that there are two important next steps that schools can take to monitor and maintain their alignment of curriculum, instruction and assessment. The first is for schools to become involved in the Department of Public Instruction's classroom assessment initiative. Central office administrators and principals in each school district have had an opportunity to participate in an introductory workshop. Those who participated have all the materials for conducting the training at the school level In addition, materials can be purchased through the Publications Office of the North Carolina Department of Public Instruction. If your school's principal has not received the training, locate an administrator in your district who has been trained and schedule the workshop for your school. The classroom assessment initiative is a staff development "must" for all schools.

Handout – Alignment of Curriculum and Assessment

Refer participants to the handout provided, which gives an overview of the relationship between curriculum and assessment. It focuses on a model of assessment that illustrates the essential components of the cycle of instruction and assessment, and provides the foundation for the training.

**Refer to model**

Direct attention to the second page of the handout that shows the model. Note that the three aspects of the assessment process represented in the model – learning targets, assessment methods, and decisions and actions – align with the three aspects of the curriculum alignment process – the written, the taught, and the tested curriculum.

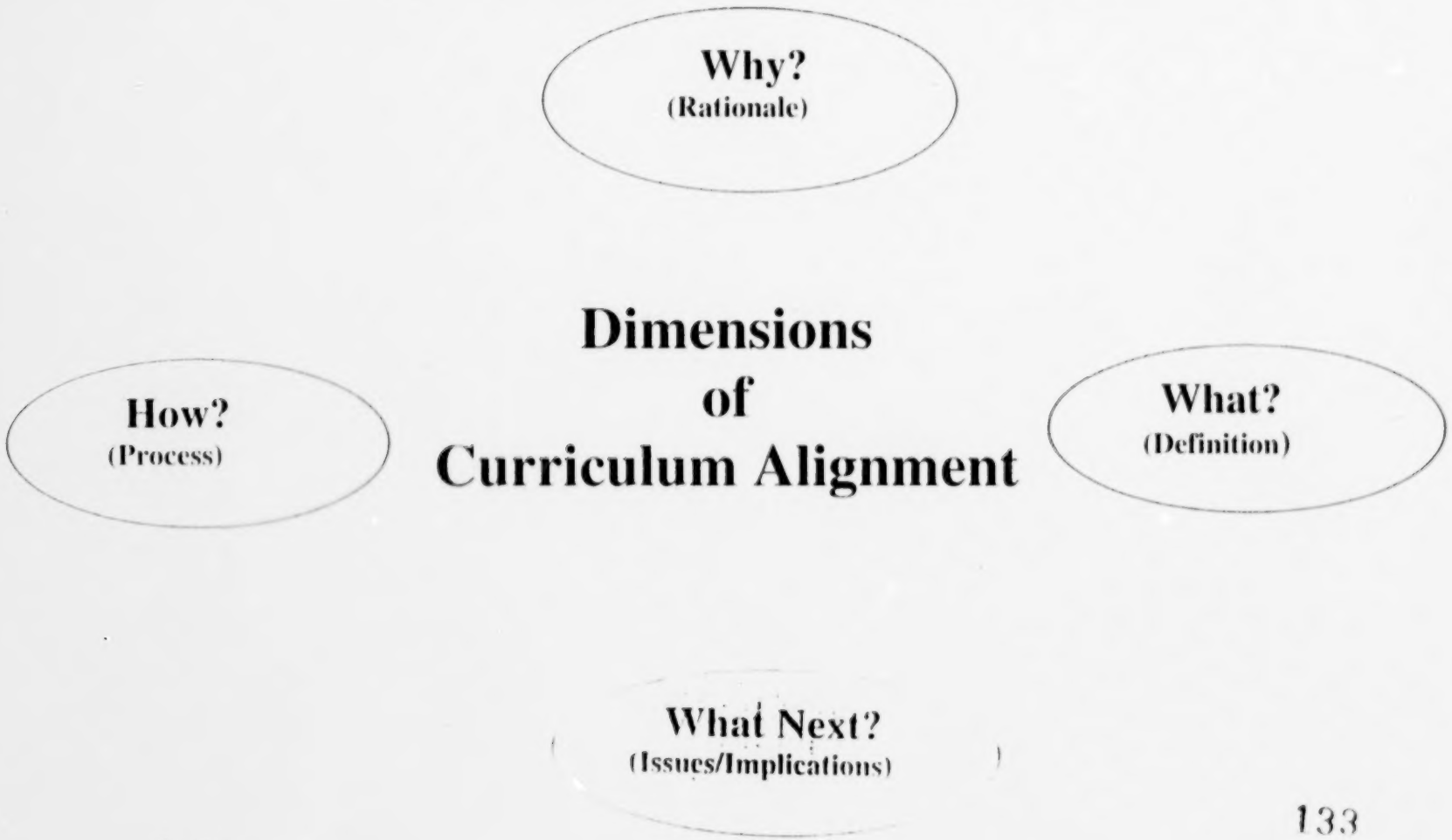
**Data analysis**

The second step that schools should take to support their curriculum alignment efforts is to conduct work sessions to focus on test data. When test results are analyzed and disaggregated, they can be used by teachers to determine what students have mastered and to identify gaps in their learning. Decisions about when and how to adjust instruction will then be data-driven. Local test coordinators can assist teachers in collecting and using the data.

**Propose action plan development**

The trainer should suggest that participants consider including the classroom assessment initiative and a workshop on using test data as major components of a school-wide action plan for maintaining curriculum alignment. The development of such an action plan can be an extension of this training or an appropriate next step after this training.

**Section III Activity 12**
**Transparency – Dimensions of Curriculum Alignment**



## Section III Activity 12
## Transparency

## Issues and Implications of Alignment
## Group Tasks

- Form groups
- Select recorder/reporter
- For each of the following groups, discuss the issues and implications of having alignment in place and of not having curriculum alignment:
    - Students
    - Teacher
    - Administrators
    - Schools
    - Districts/Communities
- Recorder/reporter from each group report to whole group

# Section III Activity 12
# Handout - Alignment of Curriculum and Assessment

The North Carolina ***Standard Course of Study*** sets content standards for what students should know and be able to do. The North Carolina ABCs Accountability Plan establishes performance standards which specify the level of proficiency a student must reach in order to have met specific content standards in specified subject areas. These performance standards are indicators of proficiency for those content areas that are tested.

## Balanced Assessment Program

A balanced assessment program for North Carolina schools, teachers, and students serves multiple purposes. Classroom assessment informs instruction and monitors students' progress, while statewide testing focuses on accountability for student achievement and quality programs. Accountability measures are the means of checking broadly to determine what has been learned within the school. These assessments allow for corrections in instructional focus at a program level and are important indicators of the degree to which all students are learning the ***Standard Course of Study***. These data also help teachers determine students' progress from year to year. Results from accountability measures provide one source of information for parents and the public in a timely and accurate manner.

Ongoing classroom assessments are multifaceted and document students' progress over time. They are planned and administered by the classroom teacher and are focused on improving learning, readjusting instruction, and promoting quality, in-depth student work. These assessments make use of various strategies such as observations and open-ended questions and resources such as instructional management systems (test item banks) and portfolios. They encourage the observation of processes and the collection of student products. These assessments inform instructional planning and student, teacher, and parent conferences where individual student progress and future goals are discussed.

The North Carolina Department of Public Instruction believes that a balanced assessment program supports implementation of the ***Standard Course of Study***. Balanced assessment includes testing for accountability purposes and the continued development of quality classroom assessment as vehicles to prepare students to master high content and performance standards. The strategies most likely to result in long-term growth and learning of high quality will result from effective use of classroom assessments as an integral part of instruction. Additionally, strong classroom assessment engages students in self-assessment and greater ownership for their own learning. Quality classroom assessment is essential to the goals of high student achievement and the continuous improvement of schools.

## Model for Teaching and Learning

A strong model for teaching and learning includes classroom assessment as an integral part of a balanced assessment program. In an instruction-assessment cycle *assessment methods* are tied to *learning targets* and then to *decisions* about instruction. In the initial part of the cycle, learning targets (goals) are clarified and students know in advance what they are expected to learn. Teachers use their in-depth understanding of the curriculum to identify the most important learning goals and establish priorities for instruction in order to build on students' prior understandings. They consider multiple targets – factual information, concepts, processes, reasoning, applications, and attitudes. They establish high expectations for all students for all important learning targets. Most importantly, they are able to clarify for themselves and their students what those targets are and what mastery of them will look like.

Since the primary users of classroom assessment are teachers and students, the most important purpose is to direct and inform student learning. Teachers and students need multiple evidences about each student's understandings and performances to diagnose, monitor progress, evaluate achievement, and plan for future instruction. Teachers use a variety of assessment methods, both formal and informal, to gather

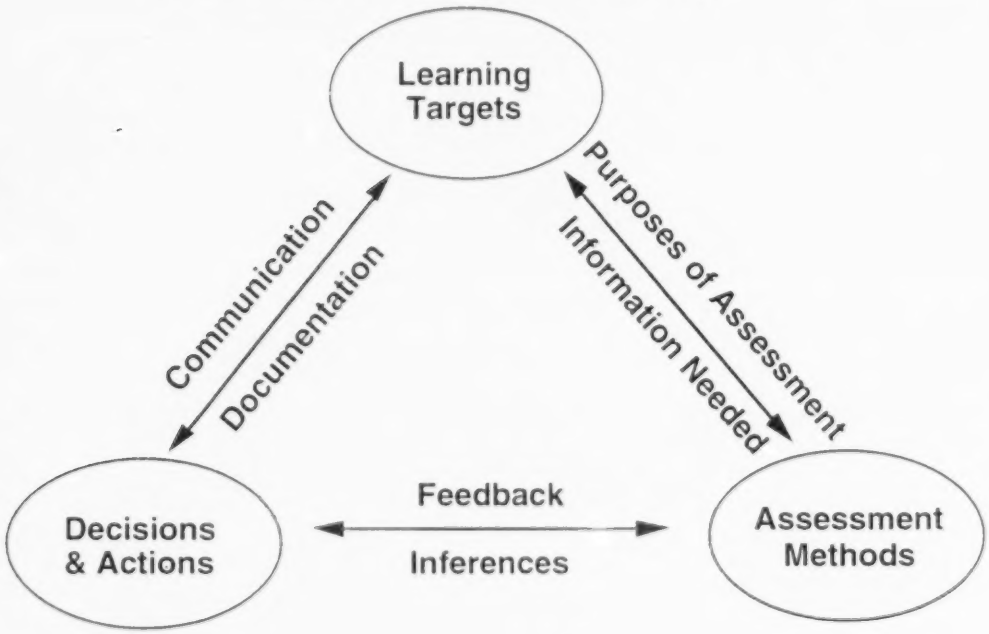
evidence of student learning. They match the type of assessment method to the learning target they want to measure and use strategies that ask students to demonstrate their thinking and reasoning. Through an ongoing process teachers may use classroom activities both to instruct and assess at the same time. What is important is that evidence of student learning is gathered with a variety of assessment methods, in multiple contexts, and over an extended period of time.

As they gather the evidence about students' learning through classroom assessment, teachers make sense of assessment information. They ask themselves reflective questions. For example, they may ask:

- What do these errors actually tell me about the students' thinking and understanding?
- Do I have sufficient evidence to know how well the students really understand?
- How well can I generalize about how much students know and can do?
- What other evidence may I need?

Reflection helps teachers decide what information and feedback can be extracted from student assessment data and what inferences and interpretations can be made about student learning.

***Assessment Cycle:***
***A Model for Teaching and Learning***




In the last part of the model teachers document, act on, and communicate information from the assessments. By taking action based upon what the students understand and can do, teachers are likely to be more effective in their decisions. They may decide to reteach key concepts, to move to the next unit of instruction, to regroup students for further instruction, or to allow more practice and application time. Documentation of student learning occurs throughout the teaching and learning model and will include diverse formats: checklists, anecdotal records, observations, grades, portfolios. Communication can provide clear, precise, useable feedback to students, parents, administrators, or other interested adults. This communication can be formal (a report card or scheduled conference) or informal (a telephone conversation,

note, or conversation). The cycle of teaching and learning will repeat again and again throughout the year, with the teacher's identifying and clarifying the next learning targets.

Both classroom assessment and statewide testing focus on the learning targets that are described in the ***Standard Course of Study***, albeit it for different purposes. The Department of Public Instruction is supporting these purposes by establishing an accountability plan and a classroom assessment initiative, as well as establishing procedures to evaluate both the state curriculum and the corresponding assessment program. Future changes in the scope and form of statewide assessments will therefore be based on the ***Standard Course of Study***.

# SECTION III: ACTIVITY 13

| TIME | PURPOSE | SETTING | MATERIALS |
|---|---|---|---|
| 15 minutes | • To assess learning | • Individual<br>• Whole Group | • Handout: K-W-L Chart |

**Describe Activity**

Participants will assess the extent to which the training has met their expectations and needs.

**Activity Directions**

Handout – K-W-L chart

Instruct participants to retrieve the **K-W-L chart** they completed during Section I Activity 1. Tell them to review the points they listed in the **K** column to check for accuracy. Direct them to correct any misconceptions or inaccuracies noted.

**Review K column**

**Review W column**

Next instruct participants to review the points in the **W** column. Have them determine if all points listed have been addressed in the training. They should assess the extent to which their learning needs have been met.

If points were not addressed in the training, assist participants in locating additional sources of information. Suggest they consult the resources listed in the bibliography.

**Complete L column**

As a final step, direct participants to summarize the essential learnings from the training in the **L** column.

## EVALUATION FORM

**Title of Presentation:** _____

**Presenter(s):** _____

**Date:** _____

**Location:** _____

**Participant's Position:** _____

**School:** _____

---

**Part I**

1. **What was the most useful part of this session?**
   •

2. **What did you learn from this session?**
   •

3. **How will this help you in your position?**
   •

---

**Part II**

Please indicate your opinion of this session by checking the appropriate column according to the scale below:

**SA**=Strongly Agree **A**=Agree **D**=Disagree **SD**=Strongly Disagree

| Statement | SA | A | D | SD |
|---|---|---|---|---|
| 1. The purpose/objectives of the session were clear. | | | | |
| 2. The presentation increased my knowledge of the content. | | | | |
| 3. The presentation was organized effectively. | | | | |
| 4. Activities were appropriate to my needs. | | | | |
| 5. The presenter(s) encouraged and allowed time for questions. | | | | |
| 6. As an overall evaluation of this session, I consider it worthwhile. | | | | |

---

**Part III Additional Comments/Suggestions**

•
•

# PROFESSIONAL DEVELOPMENT EVALUATION

Title of Presentation:_____

Objective(s)/Purpose(s):_____

Presenter:_____ Location:_____

Participant's Position:_____ School:_____

---

Part I

1. What was the most useful part of this activity?_____

_____

_____

2. What was the least useful part of this activity?_____

_____

_____

3. What did you learn from this activity? _____

_____

_____

_____

4. How will this help you in your position?_____

_____

_____

5. Why are you attending this professional development?_____

_____

_____

Part II

Please evaluate the activity by checking the appropriate column according to the scale below.

SA = Strongly Agree  A - Agree  D = Disagree  SD = Strongly Disagree

| Statement | SA | A | D | SD |
|---|---|---|---|---|
| 1. The purpose(s)/objective(s) of the activity were clear. | | | | |
| 2. The activity increased my knowledge of the content area. | | | | |
| 3. The activity was organized effectively. | | | | |
| 4. Questions were allowed and encouraged. | | | | |

Part III

1. In order to meet your needs, what is the first follow-up that should be offered?

_____

_____

2. Comments/Suggestions:_____

_____

_____

# Bibliography

Bushweller, Kevin. Teaching to the Test. (September 1997). *The American School Board Journal*, 184(9) 20-25.

English, Fenwick W. *Curriculum Auditing*. Lancaster, Pennsylvania: Technomic Publishing Co., Inc., 1988.

English, Fenwick W. *Deciding What to Teach: Developing, Aligning, and Auditing the Curriculum*. Newbury Park, California: Corwin Press, Inc., 1992.

English, Fenwick W. *Developing, Aligning, and Auditing the Curriculum*. The Video Journal 1995, Volume 5, Video I.

# Questions?

For questions about this skill packet on Curriculum Alignment, contact

Public Schools of North Carolina
Department of Public Instruction
Instructional Services Division

Susan Temple, Social Studies Consultant 919-715-1884

## Skill Packets Available Through NC HELPS

**Classroom Management**

**Curriculum Alignment**

**Extended Opportunities for Student Learning**

**Leadership Development**

**Needs Assessment**

**Safe and Orderly Schools**

**School-Based Partnerships**

**Parental/Community Involvement: Strategies to Train Parents**

**Planning for School Improvement**

**Professional Development**

**Using Data for School Improvement**

**Working with Today's Families**